27 June 2024

# CURRICULUM VITAE

**Name: Stephen Keith Tyring, M.D., Ph.D., M.B.A.** **Date: 27 JUN 2024**

## PRESENT POSITION AND ADDRESS

**Clinical Professor:**
Departments of Dermatology, Microbiology & Molecular Genetics and Internal Medicine (Infectious Diseases)
The University of Texas Health Science Center, Houston

**Voluntary Clinical Professor:**
Department of Clinical Sciences
Tilman J Fertitta Family College of Medicine
University of Houston

**Member:**
The Graduate School of Biomedical Sciences
The University of Texas Health Science Center, Houston

**Adjunct Professor of Biological Sciences:**
The School of Public Health
The University of Texas Health Science Center, Houston

**Medical Director: 2004 to present**


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Fax: (281) 864-3576


[redacted]

## EDUCATION

1967-1971 Indiana State University, B.A. (Biology/Chemistry)
1971-1973 Abilene Christian University, M.S. (Biology/Chemistry)

| | |
|---|---|
| 1975-1976 | Texas A & M University (Microbiology) |
| 1976-1979 | Texas Tech University, Ph.D. (Medical Microbiology) |
| 1979-1983 | University of Texas Medical Branch, M.D. |
| 1979-1984 | University of Texas Medical Branch, Postdoctoral training (with Dr. Samuel Baron, Chairman, Department of Microbiology) |
| 1983-1984 | University of Texas Medical Branch, Internship in Internal Medicine |
| 1984-1987 | University of Alabama in Birmingham, Resident in Dermatology |
| 2001-2003 | Rice University, Masters in Business Administration |

## PROFESSIONAL AND TEACHING EXPERIENCE

| | |
|---|---|
| 1993-2004 | Professor, Departments of Dermatology, Microbiology & Immunology and Internal Medicine, UTMB<br>Member of Sealy Center for Vaccine Development, UTMB<br>Adjunct Professor of Biological Sciences (appointment 2000), UT Health Science Center at Houston, School of Public Health |
| 1989-1993 | Associate Professor, Departments of Microbiology and Immunology, Dermatology and Internal Medicine, UTMB |
| 1987-1989 | Assistant Professor, Departments of Microbiology and Dermatology, UTMB |
| 1984-1987 | Adjunct Assistant Professor of Microbiology, UTMB |
| 1979-1984 | Research Associate, Department of Microbiology, UTMB |
| 1976-1979 | Lab Instructor in medical microbiology, Texas Tech Univ. School of Medicine |
| 1975-1976 | Lab Instructor in general microbiology, Texas A & M University |
| 1973-1975 | Research Associate at Das Institut für biologische Forschung, Cologne, West Germany |
| 1971-1973 | Teaching Assistantship in freshman biology labs, Abilene Christian University |

## LICENSURE INFORMATION

Texas, G5714
Board Certification: American Board of Dermatology

## PROFESSIONAL SOCIETIES

Houston Dermatology Society
(Secretary-Treasurer 2001-2003, President 2004)
**American Dermatological Association
**Noah Worcester Dermatological Society
**Sigma Xi Research Society
**Society for Experimental Biology and Medicine
**American Federation for Clinical Research
**American Association for Cancer Research
**Infectious Disease Society of America (Fellow)
Harris County Medical Society
Texas Medical Association
Texas Dermatological Society

(member: Board of Trustees, President 2009-2010)
Southern Medical Association
American Society for Microbiology
American Academy of Dermatology
(Chair of Committee on Sexually Transmitted Diseases, 2000-2008)
(Ad hoc Task Force on Bioterrorism, 2002-present)
Society for Investigative Dermatology
(President of Southern Section, 1991-1992)
(Committee on Long-range Planning and Priorities, 2002-present)
American Medical Association
American Association for the Advancement of Science
American Association of University Professors
Dermatology Foundation
(member of Medical and Scientific Committee 1997-2000)
Dermatology Foundation, Annenberg Circle
Dermatology Foundation, Vice-Chair Leaders Society
Dermatology Foundation, Board of Trustees
International Society of Dermatology
International Society for Interferon Research
International Society for Antiviral Research
European Academy of Dermatology and Venereology
**elected

## HONORS

American Academy of Dermatology Presidential Citation (2016)
Alpha Omega Alpha Honor Medical Society
Joseph B. Kass Award for Research in Prevention of Disease (1982)
Medical Student Research Award (1983)
Mead Johnson Award for Excellence of Research by Intern-Resident (1984)
Roche Laboratory's Award in Basic Sciences, Intern-Resident Division (1984)
Roche Laboratory's Award in Basic Sciences, Intern-Resident Division (1985)
J. Lewis Pipkin Award in Dermatology (1986)
Mead Johnson Award for Excellence of Research by Intern-Resident (1986)
Roche Laboratory Award for Excellence in Clinical Research, Intern-Resident Division (1986)
American Medical Association Award for Outstanding Clinical Research (1986)
Paul Anderson Memorial Research Award from Pacific Dermatology Association (1990)
Robert G. Freeman, M.D. Mentoring & Leadership Award for Outstanding Dedication and Contributions to Dermatology from Texas Dermatological Society (2014)
American Academy of Dermatology Presidential Citation (2016)

## EDITORIAL BOARDS

- *Journal of the American Academy of Dermatology (Editorial Board of JAAD Reviews)*
- *Dermatology Digest*
- *Journal of Cutaneous Medicine and Surgery*

- *Skin Research and Technology*
- *Skin Therapy Letter*
- *Genital Herpes Management News*
- *Dermatologic Therapy, guest editor*
- *Dermatology Clinics of North America, guest editor*
- *Revista de Ciencias Biologicas e da Saude*
- *International Journal of Dermatology*
- *Anais Brasileiros de Dermatologia*

REVIEWER FOR THE FOLLOWING JOURNALS

- *Archives of Dermatological Research*
- *Journal of Investigative Dermatology*
- *Journal of the American Academy of Dermatology*
- *Archives of Dermatology*
- *Dermatologic Surgery*
- *Photodermatology, Photoimmunology and Photomedicine*
- *Journal of Cutaneous Medicine & Surgery*
- *Skin Therapy Letter*
- *Antiviral Research*
- *Journal of Clinical Investigation*
- *Annals of Internal Medicine*
- *Journal of Infectious Diseases*
- *American Journal of Medical Science*
- *Journal of Molecular Medicine*
- *Viral Immunology*
- *Journal of Immunology*
- *Southern Medical Journal*
- *The Medical Letter*
- *Journal of Medical Virology*
- *Journal of Clinical Virology*
- *Lancet*
- *Obstetrics and Gynecology*
- *AIDS Care*
- *Journal of Antimicrobial Chemotherapy*
- *Journal of the European Association of Dermatology and Venereology*
- *New England Journal of Medicine*
- *Journal of the American Medical Association*

STUDY SECTION AND FEDERAL REVIEW COMMITTEES

- National Institutes of Health Study Section: Epidemiology and Disease Control-2, 1991
- Member of NIH site-visit committee for General Clinical Research Center 1994
- NIAID review committee: Sexually Transmitted Diseases Cooperative Research Centers (STD-CRCS) 1995

- NIAMSD Review Committee: RFA, AR-95-003, "Clinical Studies: Skin Diseases in HIV/AIDS", 1996
- Chairman, NIAID Special Emphasis Panel for RFA: Research on Topical Microbicides for Prevention of STDs/HIV 1999
- Chairman, NIAID Special Emphasis Panel for RFA: Sexually Transmitted Diseases Cooperative Research Centers 2001
- Member of NIH Study Section ZRG1 GMA-1 10B: Small Business, Dermatology 2003
- Member of NIH Study Section ACTS (Arthritis, Connective Tissue and Skin) 2005

## STATE AND NATIONAL COMMITTEES

- American Academy of Dermatology Bioterrorism Task Force (2001-2004)
- American Academy of Dermatology Committee on Sexually Transmitted Diseases (Chairman 1999-2008)
- Board of Directors of American Cancer Society (Bay Area Unit)
- Advisory Board Member of AIDS Alliance of Bay Area
- STD Treatment Guidelines Committee of CDC AAD liaison, 1997-present
- NIAID Liaison Committee Member for American Academy of Dermatology, 1998-2003
- Scientific Advisory Committee of Dermatology Foundation, 1998-2000
- Consultant to the National Aeronautics and Space Administration Medical Operations' Astronaut Candidate Medical Selection and Standards Review Process, 1994-present
- Scientific & Medical Advisor to the VZV Research Foundation

## COMMUNITY ACTIVITIES

- Advisory Board, AIDS Alliance of the Bay Area
- Advisory Board, Center for AIDS (Houston)
- Lecturer to various senior citizens groups on "Skin Problems of Senior Citizens"
- Medical advisor to Houston Herpes "HELP" Chapter

## INTERNATIONAL COMMITTEES

- European Research Organization on Genital Infection and Neoplasia
- Latvian Association of Dermatovenerologists
- European Association of Dermatology and Venerology

## COMMITTEE RESPONSIBILITIES

- Executive Committee of the Faculty of Medicine (Member at Large) 1993 - 1994
- Department of Dermatology Residency Selection Committee

## TEACHING RESPONSIBILITIES

- Lectures to Dermatology residents and students on Dermatology elective (UT, Baylor)
- Supervision and clinical teaching of dermatology residents and senior medical students (on elective) on the diagnosis and treatment of outpatients in the dermatology clinic
- Seminars on current research given to the Departments of:Dermatology, Microbiology, Internal Medicine, Pediatrics, OB/Gyn, Family Medicine and Radiation Oncology.

## MEMBER ON SUPERVISORY COMMITTEES FOR GRADUATE STUDENTS

Afshan Anjum, M.S.
Mark Evers, M.D., M.S.
Deborah Payne, B.A., Ph.D.
James Patterson, B.A., M.D., Ph.D.
Wenjing Zhou, M.D., M.S.
Omeed Memar, M.D., Ph.D.
Elsa Haubold, B.A., Ph.D.
Hernan Sierra, B.A., Ph.D.
Nohelia Cajas, B.A., Ph.D.
Andrea Fuessel, M.S.

## MENTOR TO POSTDOCTORAL FELLOWS

| | |
|---|---|
| Franco Scinicariello, M.D. | 1989-1992 |
| Robert Purvis, M.D. | 1990-1992 |
| G. Luke Lewis, M.D. | 1991-1992 |
| Ira Schlesinger, M.D. | 1992 |
| Paul Rockley, M.D. | 1992-1993 |
| Richard Cirelli, M.D. | 1993-1995 |
| Deborah Payne, Ph.D. | 1993-1995 |
| Kathleen Herne, M.D. | 1994-1996 |
| Monica McCrary, M.D. | 1995-1996 |
| Martha Meeks, M.D. | 1995-1996 |
| Komal Chopra, M.D. | 1996-1997 |
| Angella Glidden, M.D. | 1996-1997 |
| Zoltan Trizna, M.D., Ph.D. | 1996-1997 |
| Tanya Evans, M.D. | 1997-1999 |
| Jessica Severson, M.D. | 1997-1999 |
| William Whitehead, Ph.D. | 1999-2000 |
| Concepcion Arrastia, M.D. (NIH WRHR Scholar) | 1999-2001 |
| Melody Vander Straten, M.D. | 1999-2001 |
| Daniel Carrasco, M.D. | 1999-2001 |
| Trisha Brown, M.D. | 1999-2000 |
| Ken Grattendick, Ph.D. | 1999-2001 |
| Kimberly Yeung-Yue, M.D. | 2001-2002 |
| Mathijs Brentjens, M.D. | 2001-2002 |
| Karan Sra, M.D. | 2002-2005 |
| Gisela Torres, M.D. | 2002-2003 |
| Jashin Wu, M.D. | 2003-2004 |
| Katie Pang, M.D. | 2003-2004 |
| Vandana Madkan, MD | 2005-2007 |

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|---|---|
| Julie Brantley, MD | 2005-2006 |
| Anita Arora, MD | 2006-2007 |
| Anne Marie Tremaine, MD | 2007-2008 |
| Brenda Bartlett, MD | 2007-2009 |
| Aron Gewirtzman, MD | 2007-2008 |
| Parisa Ravanfar, MD | 2008-2009 |
| Rosella Creed, MD | 2008-2009 |
| Anita Satyaprakash, MD | 2008-2009 |
| Katie Morrison, MD | 2009-2010 |
| Christopher Willison, MD | 2009-2010 |
| George Magel, MD | 2010-2011 |
| Catherine DiGiorgio, MD | 2010-2011 |
| Kassie Heitz, MD | 2010-2011 |
| Whitney LaPolla, MD | 2010-2012 |
| Rana Mays, MD | 2011-2012 |
| Rachel Gordon, MD | 2011-2013 |
| Marigdalia Ramirez-Fort, MD | 2012-2013 |
| Farhan Khan, MD | 2012-2013 |
| Aparna Tamirisa, MD | 2013-2014 |
| Christopher Downing, MD | 2013-2015 |
| Jacqueline Guidry, MD | 2014-2015 |
| Sivaramya Kollipara, MD | 2014-2015 |
| Michael Lee, MD | 2014-2015 |
| Zeena Nawas, MD | 2015-2016 |
| Lawrence Tong, MD | 2015-2016 |
| Jared Peranteau, MD | 2015-2017 |
| Kevin Sharghi, MD | 2016-2017 |
| Ramya Vangipuram, MD | 2016-2017 |
| Christopher Haley, MD | 2017-2019 |
| Uyen Ngoc Mui, MD | 2017-2019 |
| Jennifer Martin, MD | 2018-2019 |
| Ravi Patel, MD | 2018-2019 |
| Ritu Swali, MD | 2019-2020 |
| Alfredo Siller Jr., MD | 2020-2021 |
| Joseph Jebain, MD | 2020-2021 |
| Austinn Miller, MD | 2021-2022 |
| Susuana Adjei, MD | 2021-2023 |
| Kevin Burningham, MD | 2023-2024 |
| Mahmud Alkul, MD | 2023-2024 |
| Deepika Narayanan, MD | 2024-present |
| Imran Baig, MD | 2024-present |

## MENTOR TO UNDERGRADUATE SUMMER RESEARCH STUDENTS in Laboratory

| | |
|---|---|
| A. Goel | 1994 |
| Stephanie Shaw | 1997 |
| Cynthia Chi | 1997 |
| John Rogers | 1999 |
| Michael Lu | 1999 |
| Kimberly Au | 1999 |
| Vijay Mikkilineni | 2001 |
| Yu He | 2002 |

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|---|---|
| Matthew Huante | 2007 |
| Victoria Maldonado | 2008 |
| Alexa Li | 2009 |
| Kathryn Camero | 2009 |
| Andres Sepulveda | 2009 |
| Harrison Nguyen | 2010-2019 |
| Louie Rodriquez | 2012 |
| Anjali Patel | 2013 |
| Julie Wu | 2014-2020 |
| Thomas Hsiao | 2015 |
| Deepika Narayanan | 2015-2023 |
| Brooke Bartley | 2020-2024 |
| Jennifer Landes | 2021-2024 |
| Veda Kulkarni | 2022-2024 |
| Drew Moore | 2020-present |
| Audrey Nguyen | 2023-present |
| Anna StDenis | 2024-present |

## MENTOR TO MEDICAL STUDENTS AND DERMATOLOGY RESIDENTS in Clinic

Stephanie Sim, M.D.
S-H. Chen, M.D.
Omeed Memar, M.D., Ph.D.
Joel Apisarnthanarax, M.D.
Pat Walsh, M.D., Ph.D.
Angela Yen, M.D.
Adam Kaspar, M.D.
Bruce Boyd, M.D., Ph.D.
Adam Czelusta, M.D.
Kevin Nagamani, M.D.
Lindsey Hicks, M.D.
Melissa Diamantis, M.D.
Kathryn Harmonson, M.D.
Jeffery Drucker, B.S.
Brandon Christianson, B.S.
Janice Wilson, M.D.
Amber Gill, M.D.
William Tausend, MD
Hung Doan, MD, PhD
Laurie Temiz, MD

## MENTOR TO INTERNATIONAL MEDICAL STUDENTS AND PHYSICIANS

| | |
|---|---|
| A. Laghi (Italy) | 1990 |
| H. Schowten (Netherlands) | 1993-1994 |
| H. Van Vleuken (Netherlands) | 1993-1994 |
| Gen. I. Nedelcu, M.D., Ph.D. (Romania) | 1994 |
| S. Rubins, M.D. (Latvia) | 1998-1999 |
| E. Brewer, M.D. (Latvia) | 1998-1999 |
| L. Albrecht, M.D. (Canada) | 1999 |
| O. Lupi, MD, PhD (Brazil) | 1999-2001 |

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|---|---|
| C. Dianzani, M.D. (Italy) | 1999-2000 |
| W. Roncalli, M.D. (Brazil) | 2001-2002 |
| N. Mendoza, M.D. (Columbia) | 2006-2015 |
| F. de Souza, MD (Brazil) | 2010 |
| F. Cerci, MD (Brazil) | 2010 |
| P. Pattanaprichakul, MD (Thailand) | 2013-2014 |
| T. Hinojosa, MD (Mexico) | 2016-2020 |
| Daniella Zaynoun (Lebanon) | 2024 |

## MAJOR RESEARCH INTERESTS

1. Role of specific viruses in sexually transmitted diseases: HPV, HIV, HSV, VZV
2. Role of these viruses in the pathogenesis squamous cell carcinomas of the skin, cervix, ano-genital mucosa, and oral epithelia
3. Association of human herpes 8 virus with specific human diseases
4. Mechanism of action of cytokines and immunomodulatory agents as antiviral agents
5. Impact of cytokines and immunomodulatory agents on oncogenes and suppressor genes
6. Evaluation and testing of new antiviral and antitumor agents in clinical trials
7. Evaluation and testing of new antiviral vaccines: HPV, HIV, HSV, VZV

## FEDERAL GRANTS

1. NIAID and Collaborative Antiviral Study Group (CASG): "Acyclovir with and without Prednisone for the Treatment of Herpes Zoster. A Randomized, Placebo-Controlled Trial" 1984-1994.

2. NIAID: "Treatment of Condyloma Acuminatum with Three Different Interferons Administered Intralesionally: A Multicentered, Placebo-Controlled Trial" 1985-1986.

3. NIAID: "Treatment of Condyloma Acuminatum with Three Different Alpha Interferon Preparations Administered Parenterally: A Double Blind, Placebo-Controlled Trial". 1986-1987.

4. NIAID: Grant No. 1RO1 AI26896-01A1: "Mechanisms of Interferon Action Against Papillomaviruses." 1989-1993. Principal Investigator $1,800,000

5. NIAID: Grant AI-62554: "Evaluation of SQ32, 756 (BV-ARA-U) Versus Acyclovir in the Treatment of Localized Herpes Zoster in Immunocompromised Patients (-37)" 1991-1995.

6. NIAID: Grant AI-62554: "Evaluation of SQ32, 756 (BV-ARA-U) Versus Acyclovir in the Treatment of Localized Herpes Zoster in HIV-Infected Patients (-38/-022)" 1991-1996.

7. NASA: "Incidence of Latent Virus Shedding During Space Flight" 1995-2002.

8. Centers for Disease Control: "Pilot Surveillance for Acyclovir Resistant Herpes Simplex Virus" 1997-1998.

9. NIH: UTMB WRHR Career Development Center of Excellence (Mentor and participator training site) 1998-2003.

10. NIAID: "Polymorphism of the Herpes Simplex Virus Receptor" 1998-2008.

11. NIAID: Use of the Polymerase Chain Reaction to Diagnose Varicella-Zoster Virus Infections and to Monitor Anti-Viral Therapy" 1999- 2002.

12. NIAID: "Dynamics of Interleukin 10 in Neuroimmune Interactions": Co-Investigator, 2000-2005.

13. NINDS: "Analgesia in Herpes Zoster and Postherpetic Neuralgia": Consortium Principal Investigator (R21 grant), 2001-2007.

14. NIH, NIAID, DMID and GlaxoSmithKline: "A Double-blind, Randomized, Controlled Phase III Study to Assess the Prophylactic Efficacy and Safety of gD-Alum/MPL Vaccine in the Prevention of Genital Herpes Disease in Young Women who are HSV- and -2 Seronegative" Sub-investigator, 2003-2010.

15. NCI: "Genetic Resistance to Oncogenic Human Papillomaviruses" (RO3CA030730) Principal Investigator, 2003-2006.

16. NIAID: "Molecular Basis of Infectious Disease" (1 T32 AI055449-01A2; PI: S. Norris) Co-Investigator (i.e. Mentor), 2005-2015.

17. NIH: "The effect of HPV on apoptosis and cellular proliferation." (K08 DC010337-01A2; PI: M. Underbrink) Co-Investigator (i.e. Mentor), 2011 – 2016.

18. NIH: "A trial to determine the effect of psoriasis treatment on cardiometabolic disease" (1-R01-HL-111293 to University of Pennsylvania ORS Institution # 10031364; PI: J. Gelfand) Co-Investigator, 2014- 2024

19. NIH: Vascular Inflammation in Psoriasis Extension Trial; 2024-present

## INTRAMURAL AND FOUNDATION GRANTS

20. UTMB "Investigation of Combination Therapies with Polyribonucleotides and Immunomodulatory Agents Using Shope Papillomavirus-induced Carcinomas in Rabbits" 1987-1988.

21. Dystrophic Epidermolysis Bullosa Research Association (DEBRA): "An Evaluation of Cell Mediated Immunity in Persons with Inherited Forms of Epidermolysis Bullosa" 1987-1988.

22. March of Dimes Birth Defect Foundation: "An Evaluation of Histocompatibility Antigens (HLA) in Patients with Inherited Forms of Epidermolysis Bullosa" 1989-1991.

23. Sealy Foundation Grant: "Genetic Susceptibility to Cutaneous Malignancy in Inherited Forms of Epidermolysis Bullosa" 1991-1993.

24. Yamanouchi USA Foundation: "Clinical Development of Anti-Herpes Drugs" 2001-2002.

25. Sealy Center for Environmental Health and Medicine: "Interaction of Risk Factors for Cervical Cancer": Principal Investigator. 2001-2002.

## OTHER SPONSORED STUDIES (PRINCIPAL INVESTIGATOR)

26. Schering Corporation: "Treatment of Giant Condyloma Acuminatum with Intralesional Interferon Alpha" 1986-1987.

27. Biogen Corporation: "A Double-Blind Placebo Controlled Study of the Safety and Efficacy of Two Regimens of Recombinant Interferon Gamma (rIFNγ) in the Treatment of Condyloma Acuminatum" 1988-1990.

28. Schering Corporation: "Prevention of Transfusion-associated non-A, non-B Hepatitis by Interferon" 1988-1991.

29. Schering Corporation: "The Effect of SCH 30500 on Squamous Cell Carcinoma" 1989-1990.

30. SmithKline Beecham Pharmaceuticals: "A Double-Blind, Randomized Placebo-Controlled Parallel Group Study to Assess the Safety and Efficacy of Oral BRL42810 in the Treatment of Patients with Uncomplicated Herpes Zoster, Protocol 008" 1990-1992.

31. SmithKline Beecham Pharmaceuticals: "Treatment of First Episode Genital Herpes with Famciclovir, an Acyclovir Controlled Trial, Protocol 040" 1991-1993.

32. SmithKline Beecham Pharmaceuticals: "Open, Non-Randomized, Dose-Escalation of Evaluation of the Efficacy and Safety of BRL 39123A in the Treatment of Mucocutaneous Herpes Simplex Infection in Immunocompromised Patients" 1991-1993.

33. Burroughs Wellcome Co.: "A Multicenter, Double-Blind, Controlled Trial Comparing Oral Acyclovir to Oral 256U87 for the Treatment of Herpes Zoster in Immunocompetent Patients 50 years of Age and Older, Protocol 05" 1991-1992.

34. Burroughs Wellcome Co.: "A Multicenter Double-Blind, Placebo-Controlled Trial Evaluating 256U87 for the Treatment of Herpes Zoster in Immunocompetent Patients Less than 50 Years of Age, Protocol 06" 1991-1992.

35. Burroughs Wellcome Co.: "A Study of Investigate the Efficacy and Safety of Orally Administered 256U87 in the Treatment of Recurrent Genital Herpes in Immunocompetent Patients, Protocol 04" 1991-1992.

36. Burroughs Wellcome Co.: "A Study to Investigate the Efficacy and Safety of 256U87 Versus Acyclovir in the Treatment of Recurrent Ano-Genital Herpes Infection in HIV Infected Patients, Protocol 08" 1991-1992.

37. Burroughs Wellcome Co.: "Comparative Trial of 256U87 and Acyclovir for the Suppression of Recurrent Anogenital Herpes Infections in HIV Infected Patients, Protocol 66-07" 1991-1995.

38. Burroughs Wellcome Co.: "A Comparative Trial of 256U87 and Acyclovir for the Treatment of First-Episode Genital Herpes Infection" 1992-1993.

39. Schering Corporation: "Treatment of Genital Herpes with Intralesional Interferon Alpha" 1991-1992.

40. Schering Corporation: "Treatment of Tinea Pedis with 1% Clotrimazole Cream" 1992-1993.

41. Schering Corporation: "Treatment of keloids with Intralesional Interferon Alpha" 1992-1993.

42. Hoffmann La Roche: "Treatment of Condyloma Acuminatum with Intralesional Interferon Alpha (Roferon™)" 1992-1993.

43. Matrix Pharmaceuticals, Inc.: MP#17-91-P "A Randomized, Double-Blind Controlled Study to Evaluate the Contributions of Components in the Therapeutic Implant 5-FU-3 TI 5003 when Administered to Patients with External Condylomata Acuminata" 1992-1993.

44. Oclassen Pharmaceuticals: "A Double-Blind Placebo Controlled Study in the Safety and Efficacy of 0.5% Podofilox Gel in the Treatment of External Genital Warts" 1992-1993.

45. Burroughs Wellcome Co.: "A Study to Investigate the Efficacy and Safety of Oral Valacyclovir (1000mg or 500mg, twice daily) Compared with Placebo in the Treatment of Recurrent Genital Herpes in Immunocompetent Patients, Protocol 028" 1992-1993.

46. 3M Pharmaceuticals: IMIQ-1005-06. "Vehicle-Controlled Safety and Efficacy Trial Evaluating Daily Overnight Application of 1% and 5% Imiquimod Cream for the Treatment of Genital/Cervical Warts" 1992-1993.

47. ISIS Pharmaceuticals: "A Randomized, Double-Blind, MultiInvestigator Clinical Evaluation of Comparing Two Single Dose Levels of ISIS 2105 with Vehicle Control for Therapy in Condyloma Acuminatum Patients" 1992-1993.

48. SmithKline Beecham Pharmaceuticals: "A Double-Blind, Randomized Placebo-Controlled Study to Assess the Efficacy and Safety of Oral Famciclovir in the Suppression of Recurrent Genital Herpes Infection in Women, Protocol 024" 1992-1993.

49. Burroughs Wellcome Co.: A Placebo-Controlled evaluation of Acyclovir 348U87 Cream for the Treatment of Herpes Simplex Labialis Infection. Protocol P-120-008" 1993-1994.

50. SmithKline Beecham Pharmaceuticals: "A Prospective, Randomized, Double-Blind, Multicenter, Patient-Initiated Study to Compare the Efficacy of Topical 1% Penciclovir Cream with Placebo in Patients with Recurrent Herpes Simplex Labialis Infection" 1993-1994.

51. Burroughs Wellcome Co.: "A Comparative Trials of Valacyclovir with Acyclovir for the Suppression of Genital Herpes Infections in Immunocompetent Patients, Protocol 026" 1994-1995.

52. SmithKline Beecham Pharmaceuticals: "Double Blind, Double-Dummy, Randomized, Placebo-Controlled Study to Assess the Safety of Oral Famciclovir for the Suppression of Recurrent Genital Herpes Infection, Protocol 033" 1994-1995.

53. ISIS Pharmaceuticals: "Pilot Randomized, Multiple-Dose Study of Afovirsen Sodium for Surgical Adjunctive Therapy of external Condyloma Acuminatum" 1994-1995.

54. Bristol Myers Squibb: "Double-Blind Multinational Trial Comparing Sorivudine [BV-ARA-U] (SQ32, 756) Versus Acyclovir for the Treatment of Acute Localized Zoster and the Effect on Zoster-Associated Pain in Immunocompetent Subjects" 1994-1996.

55. Gilead Sciences: "Phase I/II Study of the Safety and Efficacy of Topical 1-(s)-(3-Hydroxy-2-phosphonyl-methoxypropyl) Cytosine Dihydrate (HPMPC) in the Treatment of Condyloma Acuminatum in Patients with HIV infection" 1994-1997.

56. Pfizer Pharmaceutical: "Multicenter, Randomized, Double-Blind, Parallel, Placebo-Controlled Safety and Efficacy Study of Tioconazole 20% in the Treatment of Distal Subungual Onychomycosis of the Toenail" 1994-1995.

57. Burroughs Wellcome Co.: "A Randomized Controlled Study of Acyclovir versus Netivudine for Treatment of Herpes Zoster, Protocol 011" 1994-1996.

58. Collaborative Study with University of Indiana: "Attitudes Regarding Herpes Vaccination" 1994-1995. Collaborative Study with St. Louis University School of Medicine: Comparison of Direct Fluorescent Antigen with Polymerase Chain Reaction for Diagnosis of Varicella Zoster Virus Infections" 1994-1998.

59. Collaborative Study with St. Louis University School of Medicine: Comparison of Direct Fluorescent Antigen with Polymerase Chain Reaction for Diagnosis of Varicella Zoster Virus Infections" 1994-1998.

60. Collaborative Study with University of Washington: "Studies of Asymptomatic Viral Shedding in Persons with Recurrent Genital Herpes" 1994-1998.

61. Glaxo Wellcome: "A Double Blind, Multicenter Study Comparing Valacyclovir with Famciclovir for the Treatment of Uncomplicated Herpes Zoster in Immunocompetent Patients 50 Years of Age and Older" 1994-1997.

62. Bristol Myers Squibb: "An Open, Multicenter Study to Determine the Effect of Sorivudine on Dihydropyrimidine Dehydrogenase Activity in Peripheral Blood Mononuclear Cells of Patients with Acute Herpes Zoster" 1995-1996.

63. Lidak Pharmaceuticals: "A Clinic Initiated, Double-Blind, Placebo-Controlled, Multicenter Study to Assess the Safety and Efficacy of Topical n-Docosanol 10% Cream (LIDAKOL™) in Patients with Early-Stage Episodes of Acute, Recurrent Herpes Labialis" 1995-1996.

64. SmithKline Beecham Pharmaceuticals: "A Double-Masked, Double-Dummy, Randomized, Acyclovir-Controlled, Parallel Group Study to Compare the Efficacy and Safety of Famciclovir with Acyclovir in the Treatment of Patients with Ophthalmic Zoster" 1995-1997.

65. SmithKline Beecham Pharmaceuticals: "A Randomized, Double-Blind, Double-Dummy, Multicenter Acyclovir-Controlled Study to Assess the Safety and Efficacy of Oral Famciclovir for the Treatment of Herpes Zoster Infection in Immunocompromised Patients, Protocol 086" 1995-1997.

66. Astra Pharmaceuticals: "An Open Label Study to Evaluate the Effects of Chemical and Mechanical Methods of Skin Preparation Prior to Application of EMLA Cream on the Absorption of Lidocaine and Prilocaine and on the Effectiveness of EMLA Cream" 1996-1997.

67. Glaxo Wellcome, Inc.: "A Comparison of Oral Valtrex 500mg Twice Daily for Three or Five Days for Treatment of Recurrent Genital Herpes" 1996-1997.

68. 3M Pharmaceuticals: "Open-Label Trial Evaluating the Percutaneous Penetration of Imiquimod 5% Cream (Formulation U-2e) Following Overnight Application Three-Times Per Week for the Treatment of Genital/Perianal Warts" 1996-1997.

69. 3M Pharmaceuticals: "Vehicle-Controlled Study Investigating the Mechanism of Action of 5% Imiquimod Cream Applied Three Times a Week for the Treatment of Patients with Genital/Perianal Warts" 1996-1997.

70. SmithKline Beecham Biologicals: "An Open-Label Study to Evaluate Famciclovir in the Management of Acute Uncomplicated Herpes Zoster in Persons Infected with HIV" 1996-1997.

71. Bristol Myers Squibb: "A Randomized Double Blind, Placebo-Controlled Efficacy and Safety Study of Oral Lobucavir in Patients with Recurrent Herpes Labialis, Protocol 012" 1997-1998.

72. Bristol Myers Squibb: "A Randomized, Double Blind, Placebo-Controlled Efficacy and Safety Study of Oral Lobucavir in Patients with Recurrent Genital Herpes, Protocol 011" 1997-1998.

73. Gilead Sciences: "A Double Blind, Placebo-Controlled Study of the Safety and Efficacy of Cidofovir Gel for the Treatment of Molluscum Contagiosum in Patients with HIV Infection" 1997-1998.

74. SmithKline Beecham Biologicals: "A Randomized, Double-Blind, Double-Dummy Study to Assess the Efficacy and Safety of Oral Famciclovir Compared to Oral Valacyclovir for the Suppression of Recurrent Genital Herpes, Protocol 210" 1997-1999.

75. SmithKline Beecham Biologicals: "A Double-Blind, Randomized, Parallel Group, Multi-Center Study, to Compare the Safety and Efficacy of 10 Days of Oral Famciclovir 750 mg Three Times a day with Oral Valacyclovir 1 g Twice a Day in Reducing the Frequency of Subsequent Lesional Recurrences of HSV-2 in Patients Following Treatment of First Episode Genital HSV-2, Protocol 191" 1997-1998.

76. Glaxo Wellcome, Inc.: "A Randomized, Double-Blind, Placebo-Controlled Evaluation of Valaciclovir for the Prevention of Herpes Simplex Virus Transmission in Heterosexual Couples" 1997-2002.

77. Glaxo Wellcome, Inc.: "An Open-Label Study of Valacyclovir HCl 1.5 grams bid for Treatment of Uncomplicated Herpes Zoster in Immunocompetent Patients 18 years of Age and Older" 1997-2001.

78. Glaxo Wellcome, Inc.: "A Double-Blind Study Comparing Two Doses of Valacyclovir HCl for the Treatment of Uncomplicated Herpes Zoster in Immunocompromised Patients 18 Years of Age and Older" 1997-2006.

79. Pentose: "A Phase I/II Dose-Ranging Study of the Safety and Efficacy of PEN203 in the Treatment of Common Warts" 1998-1999.

80. Pentose: "A Phase I/II Dose-Ranging Study of the Safety and Efficacy of PEN203 in the Treatment of Genital Warts" 1998-1999.

81. Glaxo Wellcome, Inc.: "Herpes Advice Consortium (Herpes Questionnaire)" 1998.

82. Abbott Laboratories: "The Safety and Efficacy of Three Doses of ABT-606 Compared to Acyclovir in the Treatment of Herpes Zoster in Immunocompetent Adults" 1998-1999.

83. Bristol Myers Squibb: "A Randomized, Double-Blind, Placebo-Controlled Trial, Genital Herpes Oral Suppression Trial (GHOST) of Oral Lobucavir, Protocol 043" 1998-1999.

84. 3M Pharmaceuticals: "Safety and Efficacy Trial Evaluating 5% Imiquimod Cream Application to External Genital Warts and an Extended Treatment Area" 1998-2001.

85. 3M Pharmaceuticals: "A Phase II, Randomized, Double-Blind, Vehicle-Controlled, Dose-Escalating Study to Assess Safety and Preliminary Efficacy of Topical R-848 gel in the Treatment of Recurrent Herpes Genitalis" 1998-2000.

86. 3M Pharmaceuticals: "A Mechanism of Action Study of Aldara (Imiquimod) Cream 5% Applied Topically to Patients with Superficial Basal Cell Carcinoma" 1998-2000.

87. Schering-Plough Corporation: "A Phase II Proof of Principle Study Comparing Two Doses of Interleukin 10 (TENOVIL) Administered Subcutaneously to Placebo in Severe Psoriasis" 1999-2000.

88. Corixa Corporation: "A Multi-Center, Randomized, Controlled Phase II Study Evaluating the Effect of PVAC Treatment in Patients with Psoriasis: Protocol CCPV001-04; 1999-2001.

89. Glaxo Wellcome, Inc.: "A Multicenter, Double-Blind, Placebo-Controlled Evaluation of Valaciclovir for the Prevention/Blockage of the Progression of Cold Sore Lesion Development" Protocol HS230028; 1999-2002.

90. Corixa Corporation: "A Multi-Center, Open-Label Study Evaluating the Effect of PVAC Treatment in Patients with Psoriasis who have been Previously Treated with PVAC or Control" Protocol CCPV001-05; 2000-2002.

91. Quidel Corporation: "HSV Antibody Test CS-0105-3" 2000.

92. Genentech: "A Phase III, Randomized, Double-Blind, Parallel-Group, Placebo-Controlled, Multicenter, Multidose Study to Evaluate the Efficacy and Safety of Subcutaneously Administered Anti-CD11a in Adults with Moderate to Severe Plaque Psoriasis Who are Candidates for Systemic Therapy" 2000-2002.

93. 3M Pharmaceuticals: A Phase III, Vehicle-Controlled Study of Topical R-848 0.01% Gel Applied 2 Times per Week for 3 Weeks for Each Recurrence of Herpes Genitalis over 12 Months to Prevent Subsequent Recurrences, Protocol 1404-RESI" 2000-2004.

94. Merck & Co., Inc.: "A Study to Evaluate the Cell-Mediated Immune Responses of Herpes Zoster Patients Compared to Healthy Subjects Over a Six-Month Period" 2000-2002.

95. Harvard University School of Medicine: "Efficacy of Riluzole in the Prevention of Postherpetic Neuralgia" 2001-2002.

96. GlaxoSmithKline: "A Multicenter, Double-Blind, Placebo-Controlled Trial to Evaluate Daily Suppressive Therapy with Valtrex on the Rate of HSV Shedding in Patients with Recurrent Genital Herpes" 2001-2002.

97. 3M Pharmaceutical: "Resiquimod (R-848) 0.01% gel (U-1j) for the Treatment of Herpes Genitalis to Prevent Recurrences" Protocol 1419-RESI; 2001- 2003.

98. Quidel Corporation: "Quick-Vue Herpes Simplex Antibody Test Clinical Trial Part 2" 2002.

99. GlaxoSmithKline: "A Randomized, Double-Blind, Multicenter Study of Valtrex 500 mg Suppressive Therapy in the Reduction of Anxiety Associated with Recurrent Genital Herpes" Protocol HS240021; 2002.

100. Corixa Corporation: "A Multi-center, Randomized, Placebo-Controlled Phase 2 Study Evaluating the Effect of 15mg PVAC Treatment in Patients with Psoriasis" Protocol CCPV001-06; 2002-2003.

101. Genentech: "A Phase IIB, Randomized, Double-Blind, Parallel-Group, Placebo-Controlled, Multicenter Study to Evaluate the Efficacy and Safety of 1.0 mg/kg Subcutaneously Administered Efalizumab in Adults with Moderate to Severe Plaque Psoriasis" Protocol ACD2390g; 2002-2003.

102. Genentech: "An Open-Label, Multicenter Study to Evaluate the Efficacy and Safety of 1.0 mg/kg Subcutaneously Administered Efalizumab Followed by Efalizumab Taper in Adults with Plaque Psoriasis Previously Enrolled in Study ACD2391g" 2002-2003.

103. GlaxoSmithKline: "An Open-label Pilot Study of Valtrex 2g for One Day in the Episodic Treatment of Recurrent Genital Herpes, Protocol R-94" 2002-2003.

104. Merck & Co., Inc.: "Protocol for Obtaining Clinical Specimens to Support Validation of a Polymerase Chain Reaction and a Direct Fluorescent Antibody Assay for Detection of Varicella-Zoster Virus" Protocol 008-00; 2002-2003.

105. 3M Pharmaceuticals: "A Study of Local Immunologic Effects of Resiquimod 0.01% Gel Applied Topically to Herpes Lesions of Subjects with Recurrent Herpes Genitalis" Protocol 1438-RESI; 2002-2004.

106. Immunex/Amgen: "A Phase III, Multicenter Study of the Safety and Efficacy of Enbrel (etanercept) in Psoriasis" Protocol 16.0042; 2002-2003.

107. GlaxoSmithKline: "Reduction of postherpetic neuralgia in herpes zoster" 2002-2008.

108. Amgen: "An Open-Label, Long-Term Extension Study to Assess the Safety of Etanercept in the Treatment of Psoriasis in Adult Subjects" Protocol 115; 2003-2005.

109. Amgen: "A Phase 3 Multicenter Study to Assess the Efficacy and Safety of Etanercept 50mg Twice Weekly in Psoriasis" Protocol 117; 2003-2007.

110. Amgen: "A Multicenter, Open Label Study to Observe the Effect of Etanercept on Joint and Skin Disease in Subjects with Psoriatic Arthritis" Protocol 2003106; 2003-2005.

111. GlaxoSmithKline: "An Open-Label Study to Describe the Pharmacokinetics of Topical Applications Twice Daily for Five Days, of SB275833, 1% Ointment, and to Assess Preliminary Safety and Efficacy in the Treatment of Subjects with Uncomplicated Bacterial Skin Infections" 2003.

112. GlaxoSmithKline: "A Multicenter, Randomized, Double-blind, Placebo-controlled, Parallel Group Study to Assess the Safety and Efficacy of GW406381 25 mg and 50 mg, Administered Once Daily for 21 Days to Subjects with Postherpetic Neuralgia" Protocol CXA20009; 2003-2005.

113. Novartis: "A Six Month Open Label, Randomized Multi-Center study to Evaluate the Comparative Efficacy and Safety of Oral Famvir (famciclovir) in the Episodic (125 mg bid for 5 days) and Suppressive Treatment (250 mg bid) or Recurrent Genital Herpes" Protocol CFAM810A US07; 2003-2005.

114. Novartis: "A Randomized Multicenter, Double-Blinded Controlled Study to Compare the Effectiveness of a Single Dose (1500 mg) of Famciclovir, One Day (750 mg Q12) of Famciclovir and Placebo in Patient-Initiated Episodic Treatment of Recurrent Herpes Labialis" Protocol CFAM810A2403; 2003-2005.

115. Novartis: "A 26-week, Randomized, Multicenter, Parallel-group, Double-blind, Vehicle-controlled Study to Evaluate the Incidence of Atopic Dermatitis Flares When ASM981 (pimecrolimus) Cream is Used at the First Signs and/or Symptoms of Atopic Dermatitis and Its Safety and Tolerability in Adults 18 Years of Age and Older" Protocol CASM981C2316; 2003-2005.

116. Novartis: "Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Assess the Efficacy and Safety of a Patient Initiated 1-Day Treatment with Famciclovir 1000mg b.i.d. for Recurrent Genital Herpes Infection in Immunocompetent Patients" Protocol CFAM810A2402; 2003-2005.

117. Novartis: "A 6-Week Randomized, Multicenter, Double-Blind, Placebo-Controlled, Parallel Group Study to Investigate the Efficacy and Safety of Elidel Cream 1% in Patients with Mild to Moderate Chronic Hand Dermatitis, Followed by a 6-week Open Label Phase to Assess the Safety of Elidel Cream 1%" 2004.

118. XenoPort: "A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study Assessing the Safety and Efficacy of XP13512 in Patients with Post-Herpetic Neuralgia (PHN)" 2004-2005.

119. Serono: "A Multicentre, Randomized, Double Blind, Placebo Controlled Phase III Study of Subcutaneously Administered Onercept in the Treatment and Re-Treatment of Subjects with Moderate to Severe Plaque Psoriasis" 2004-2005.

120. Pfizer: "A Double-Blind, Randomized, Placebo-Controlled Trial of the Time to Onset of Meaningful Pain Relief in Subjects with Postherpetic Neuralgia (PHN) Treated with Pregabalin 150-600mg/day Flexible Optimized Dose or 300mg/day Fixed Dose or Placebo" 2004-2005.

121. GlaxoSmithKline: "Two Identical Double-Blind, Double-Dummy, Multicenter, Comparative Phase III Studies of the Safety and Efficacy of Topical 1% SB-275833, Applied Twice Daily, Versus Oral Cephalexin, 500mg in Adults, or 12.5 mg/kg (250mg/5ml) in Children, Twice Daily, in the Treatment of Uncomplicated Secondarily Infected Traumatic Lesions" 2004-2005.

122. Medicis: "A Randomized, Double-Blind, Placebo-Controlled Phase III Study of an Extended-Release Formulation of Minocycline for the Treatment of the Inflammatory Lesions of Acne Vulgaris" Protocol MP-0104-05; 2004-2005.

123. GlaxoSmithKline: "An International, Randomized, Double-Blind, Placebo-Controlled, Multicenter, 6-Month Study of the Efficacy and Safety of Valacyclovir 1g Once Daily vs. Placebo for the Suppression of HSV-2 Genital Herpes in Newly Infected Immunocompetent Subjects" Protocol HS2100275; 2004-2006.

124. GlaxoSmithKline: "A randomized, double-blind, placebo-controlled, multicenter 60 day study comparing the efficacy of Valtrex 1 gram once daily vs. placebo once daily in reducing viral shedding in immunocompetent subjects with recurrent HSV-2 genital herpes" Protocol HS2100273; 2004-2005.

125. Fujisawa: "A Phase 3, Randomized, Double-Blind Study to Evaluate the Efficacy and Safety of Once Daily 0.3% Tacrolimus Gel Versus Gel Vehicle in the Treatment of Psoriasis" Protocol 03-0-169; 2004-2005.

126. Amgen: "A Multicenter, Open-label, Prospective Study to Evaluate the Effectiveness and Safety of Etanercept in the Treatment of Subjects with Psoriasis" Protocol 20040190; 2004-2005.

127. Medicis: "An Open-Label Safety Study of a New Formulation of Minocycline for Treatment of Moderate to Severe Acne" Protocol MP-0104-07; 2005.

128. GlaxoSmithKline: "A Randomized, Double-Blind, Placebo-Controlled, Two-Way Crossover Study Evaluating the Efficacy of Once Daily Valacyclovir in Reducing Viral Shedding in HSV-2 Seropositive Subjects with No Previous History of Symptomatic Genital Herpes Infection" Protocol VLX103596; 2005-2006.

129. Corgentech: "A Phase 1/2 Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Dose-Ranging Study to Evaluate the Safety of Repeated Topical Application of Three Concentrations of NF-kappaB Decoy in Adults with Mild-to-Moderate Atopic Dermatitis" Protocol 110-01P; 2005-2006.

130. Abbott: "A Phase 3, Multicenter Study of the Efficacy and Safety of Long-Term Adalimumab Treatment in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol MO3-656; 2005-2006.

131. Leo Pharma: "Calcipotriene Plus Betamethasone Dipropionate Gel Compared to the Gel Vehicle in Scalp Psoriasis, in Patients Receiving Calcipotriene Plus Betamethasone Dipropionate Ointment for Psoriasis Vulgaris of Trunk/Limbs" Protocol 0502 US; 2005-2007.

132. Abbott: "A Multicenter Open-Label Continuation Study in Moderate to Severe Chronic Plaque Psoriasis Subjects Who Completed a Preceding Psoriasis Clinical Study with Adalimumab" Protocol M03-658; 2006-2009.

133. Abbott: "A Phase 2, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study Comparing the Safety and Efficacy of Subcutaneous Injections of ABT-874 vs. Placebo in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol M05-736; 2006-2009.

134. Astellas: "A Phase 3, Randomized, Double-Blind Study to Evaluate the Efficacy and Safety of BID Application of Tacrolimus Cream-B 0.1% Versus Cream-B Vehicle in the Treatment of Psoriasis" Protocol 04-0-206; 2006-2007.

135. Novartis: "A Multicenter, Randomized, Double-Blind Study to Compare the Efficacy and Safety of Patient-Initiated Famciclovir 1000mg b.i.d. X 1 Day to Valacyclovir 500mg b.i.d. X 3 Days in Immunocompetent Adults with Recurrent Genital Herpes" Protocol CFAM810A2308; 2006-2008.

136. Janus Pharma: "A Phase II, Multi-Center, Placebo Controlled, Safety, Efficacy and Absorption Evaluation of ARYS-01 (Sorvirudine) Cream, 3% in Herpes Zoster Patients" Protocol ARYS-0502; 2006-2007.

137. Galderma: "A Multi-Center, Randomized, Double-Blind, Parallel-Group Study to Demonstrate the Efficacy and Safety of Adapalene/Benzoyl Peroxide Topical Gel Compared with Adapalene Topical Gel, 0.1% Benzoyl Peroxide Topical Gel, 2.5% and Topical Gel Vehicle in Subjects with Acne Vulgaris" Protocol RD.06. SPR.18087; 2006-2007.

138. Medivir: "A Randomized, Double-Blind, Active-Controlled, Vehicle-Controlled, Subject Initiated Study Comparing Efficacy and Safety of ME-609 Versus Acyclovir Cream for Recurrent Herpes Simplex Labialis" Protocol 609-04; 2006-2008.

139. Amgen, Inc.: "Observational Post-Marketing Safety Surveillance Registry of Enbrel (etanercept) for the Treatment of Psoriasis" Protocol 20040210; 2006-2009.

140. Galderma: "Pharmacokinetics and Pharmacodynamics of Calcitriol Following Twice Daily Application of Calcitriol 3µg/g Ointment under Conditions of Maximal Use in Adolescents with Plaque Psoriasis" Protocol Number RD.06.SPR.18102; 2006-2009.

141. Dow Pharmaceutical Sciences, Inc.: "A Multi-center, Randomized, Double-Blind, Parallel-Group Study to Demonstrate the Efficacy and Safety of Adapalene Lotion, 0.1% Compared with Vehicle Lotion in Subjects with Acne Vulgaris" Protocol RD.06.SPR.18113; 2007-2008.

142. PLIVA Research & Development Ltd: "A Randomized, Double-Blind, Multiple-site, Placebo Controlled, Parallel Design, Clinical Study to Evaluate the Bioequivalence of Adapalene Gel 0.1% (PLIVA Research & Development Ltd.) Compared to Differin (adapalene 0.1%) Topical Gel (Galderma Laboratories) in Patients with Acne Vulgaris" Protocol 70716202; 2007-2008.

143. Glenmark Pharmaceuticals, Inc.: "A Randomized, Double-Blind, Placebo Controlled, Parallel Design, Multi-Site Clinical Study to Evaluate the Bioequivalence of Calcipotriene Ointment 0.005% (Glenmark Pharmaceuticals) to DOVONEX (calcipotriene ointment) 0.005% (Bristol Myers Squibb) in Patients with Moderate to Severe Plaque Psoriasis" Protocol GLK602; 2007-2008.

144. BioAlliance Pharma SA: "A Randomised, Double-Blind, Single-dose, One-Day Early Administration, Multicentre Study Comparing the Efficacy and Safety of Acyclovir Lauriad 50 mg Muco-Adhesive Buccal Tablet to Matching Placebo, in the Treatment of Herpes Labialis in Immunocompetent Patients" LIP Study (Lauriad Immunocompetent Patients Study) Protocol BA2005/21/02; 2007-2009.

145. Astellas Pharma: "A Phase II Dose-Finding Study with ASP2151 in Subjects with Recurrent Episodes of Genital Herpes" Protocol 15L-CL-101; 2007-2009.

146. Gilead Sciences, Inc.: "A Phase I, Randomized, Double-blind, Placebo-controlled Assessment of the Safety, Tolerability, and Activity of GS-9191 Ointment for the Treatment of External Genital and Perianal Warts Caused by Human Papilloma Virus Infection" Protocol GS-197-0101; 2007-2009.

147. Epiphany Biosciences, Inc.: "A Randomized, Double-Blind, Active-Controlled, Multi-Center, Parallel-Group Dose-Ranging Study Assessing the Safety and Efficacy of EPB-348 Versus Valacyclovir Among Immunocompetent Patients with an Acute Episode of Herpes Zoster" Protocol EPB348-0201; 2007-2010.

148. Hoffman-LaRoche: "A Randomized, Double-Blind, Placebo-Controlled Dose-Ranging Study to Assess the Safety, Tolerability, Pharmacokinetics and to Explore the Effect on Clinical Response and Pharmacodynamics of RO5092888 in Patients with Moderate to Severe Chronic Plaque Psoriasis" Protocol No. NS20454; 2007-2009.

149. Abbott Laboratories: "A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study Comparing the Safety and Efficacy of Two Dosing Regimens of ABT-874 to Placebo in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol M06-890; 2007-2009.

150. Abbott Laboratories: "A Phase 3, Multicenter, Open-label Continuation Study in Moderate to Severe Chronic Plaque Psoriasis Subjects who Completed a Preceding Psoriasis Study With ABT-874" Protocol M10-016; 2008-2010.

151. Abbott Laboratories: "A Phase 3, Multi-center, Randomized, Double-blind, Placebo-controlled Study Comparing the Efficacy and Safety of ABT-874 to Etanercept and Placebo in Subjects with Moderate to Severe chronic Plaque Psoriasis" Protocol M10-114; 2008-2009.

152. Abbott Laboratories: "Open-label Study of Adalimumab in Subjects Who Have a Sub-optimal Response to Systemic Therapy or Phototherapy" Protocol M10-238; 2008-2009.

153. Abbott Laboratories: "A Phase 3, Multi-center, Randomized, Double-blind, Placebo-controlled Study Comparing the Efficacy and Safety of ABT-874 to Etanercept and Placebo in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol M10-315; 2008-2009.

154. Abbott Laboratories: "A Controlled Study of HUMIRA in Subjects with Chronic Plaque Psoriasis of the Hands and/or Feet" Protocol M10-405; 2008-2010.

155. Amgen, Inc.: "A Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of Etanercept in Treating Scalp Involvement in subjects with Moderate to Severe Plaque Psoriasis" Protocol 20080014; 2008-2009.

156. aRigen Pharmaceuticals, Inc.: "Phase II/III Multicenter, Double-Blind, Controlled Trial Comparing topical ARYS-01 Cream (3% Sorivudine), Oral Valaciclovir, and combination Topical ARYS-01 Cream/Oral Valaciclovir for the Treatment of Herpes Zoster in Immunocompetent Patients 18 Years of Age or Older" Protocol ARYS-0701; 2008-2009.

157. Galderma: "Efficacy and Safety comparison of Adapalene 0.1% / Benzoyl Peroxide 2.5% Gel associated with Doxycycline Hyclate 100 mg Tablets versus Adapalene 0.1% / Benzoyl Peroxide 2.5% Vehicle Gel associated with Doxycycline Hyclate 100 mg Tablets in the Treatment of Severe Acne Vulgaris" Protocol RD.03.SPR.29074; 2008-2009.

158. Pfizer Inc.: "A Phase 2B, Multicenter, Randomized, Double-Blind, Parallel-Group, Placebo-Controlled Trial Evaluating the Efficacy and Safety of Dose Regimens with Oral CP-690,550 in the Treatment Of Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol A3921047; 2008-2010.

159. Galderma: "Efficacy and Safety comparison of Adapalene 0.1% / Benzoyl Peroxide 2.5% Gel versus Adapalene 0.1% / Benzoyl Peroxide 2.5% Gel Vehicle Gel as a 6-month Acne Maintenance Treatment" Protocol RD.03.SPR.29075; 2008-2009.

160. Graceway Pharmaceuticals: "A Phase 3, Randomized, Double-blinded, Placebo-controlled, Multicenter Efficacy and Safety Study of Six Weeks of Treatment with Imiquimod Creams for Actinic Keratoses" Protocol GW01-0703; 2008-2009.

161. Shionogi USA, Inc.: "A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Efficacy and Safety Study of Two Doses of S-777469 (400 mg BID and 800 mg BID) in Patients with Atopic Dermatitis" Protocol 0721D1424; 2008-2009.

162. Stiefel Laboratories, Inc.: "A Phase 2, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Dose-ranging Study to Investigate the Efficacy and Safety of 4 Dose Regimens of Oral Albaconazole in Subjects with Distal Subungual Onychomycosis" Protocol W0027-10; 2008-2009.

163. Graceway Pharmaceuticals: "A Follow-up Study to Evaluate Sustained Clearance Rates of Actinic Keratoses up to One Year after Completion of Studies GW01-0702, GW01-0703, GW01-0704, and GW01-0705" Protocol GW01-0803; 2008-2010.

164. Graceway Pharmaceuticals: "A Phase 3, Randomized, Double-blind, Placebo-controlled, Multicenter, Efficacy and Safety Study of Imiquimod Creams in the Treatment of External Genital Warts" Protocol GW01-0805; 2008-2009.

165. Amgen: "A Randomized Study to Evaluate the Efficacy and Safety of Adding Topical Therapy to Etanercept in Subjects with Moderate to Severe Plaque Psoriasis" Protocol 20080470; 2008-2012.

166. Merck:" A Phase IV Clinical Trial to Evaluate the Safety and Tolerability of ZOSTAVAX in Subjects >= 60 Years of Age" Protocol V211 020-01; 2008-2009.

167. Galderma: "Efficacy and Safety comparison of Adapalene 0.1% / Benzoyl Peroxide 2.5% Gel versus Adapalene 0.1% / Benzoyl Peroxide 2.5% Gel Vehicle Gel as a 6-month Acne Maintenance Treatment" Protocol RD.03.SPR.29075; 2008-2009.

168. Epiphany Biosciences: "A Randomized, Double-blind, Active-controlled, Multi-center, Parallel-group Dose-ranging Study Assessing the Safety and Efficacy of EPB-348 Versus Valacyclovir Among Immunocompetent Patients with an Acute Episode of Herpes Zoster" Protocol EPB348-0201; 2008-2009.

169. Shionogi: "A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Efficacy and Safety Study of Two Doses of S-777469 (400 mg BID and 800 mg BID) in Patients with Atopic Dermatitis" Protocol 0721D1424; 2008-2009.

170. Amgen: "A Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of Etanercept in Treating Scalp Involvement in subjects with Moderate to Severe Plaque Psoriasis" Protocol 20080014; 2008-2009.

171. Inhibitex, Inc.: "A Phase II, Multicenter, Randomized, Double-Blind, Parallel-Group, Comparative Study of FV-100 vs. Valacyclovir in Patients with Herpes Zoster" Protocol INH-FV1-005; 2009-2010.

172. Basilea Pharmaceutica International, Ltd.: "Efficacy and Safety of Alitretinoin in the Treatment of Severe Chronic Hand Eczema Refractory to Topical Therapy" Protocol BAP01346; 2009-2011.

173. Peplin Operations Pty Ltd: "A multi-center, Randomized, parallel group, double-blind, vehicle-controlled study to evaluate the Efficacy and safety of PEP005 (ingenol mebutate) Gel, 0.015% in patients with actinic keratoses ON the head (face or scalp) (REGION-IIa)" Protocol PEP005-016; 2009-2010.

174. Taisho Pharmaceutical R&D Inc.: "A Multi-Center, Randomized, Double-Blind, Vehicle-Controlled Study of the Efficacy, Safety and Tolerability of TS-022 in Adults with a Diagnosis

of Atopic Dermatitis (AD) with Moderate to Very Severe Pruritus" Protocol TS022-US201; 2009-2010.

175. Amgen: "A Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficiency and Safety of Adding Methotrexate to Etanercept in Subjects with Moderate to Severe Plaque Psoriasis" Protocol 20070559; 2009-2011.

176. Amgen: "A Phase 3 Multicenter Study to Assess the Efficacy and Safety of Etanercept 50 mg Twice Weekly in Psoriasis" Protocol 20030117; 2009-2010.

177. Merck: "A Phase III Clinical Trial to Evaluate the Efficacy, Immunogenicity, Safety and Tolerability of ZOSTAVAX in subjects 50 to 59 Years of Age" Protocol V211-022; 2009-2010.

178. Peplin: "A 12 Month, Long-term Follow-up Study of Patients With Actinic Keratosis on the Head (face or scalp) who Have Completed Day 57 in Studies PEP005-016 or PEP005-025 (REGION IIa and IIb)" Protocol PEP005-030; 2009-2010.

179. NeurogesX: "A Multicenter Randomized, Double-blind, Controlled Study to Evaluate Safety, Tolerability and Preliminary Efficacy of Two Capsaicin Concentration Variations of NGX-1998 (10% or 20% w/w) in Subjects with Postherpetic Neuralgia (PHN)" Protocol NEUROGESX PHN; 2009-2011.

180. Amgen: "A Randomized, Double-blind, Placebo-Controlled, Multiple-Dose Study to Evaluate the Safety, Tolerability, and Efficacy of AMG 827 in Subjects with Psoriasis" Protocol 20090062; 2010-2011.

181. Amgen: "A Randomized Study to Evaluate the Efficacy and Safety of Adding Topical Therapy to Etanercept in Subjects with Moderate to Severe Plaque Psoriasis" Protocol 20080470; 2010-2011.

182. Leo Pharmaceuticals: "Calcipotriol Plus Betamethasone Dipropionate Topical Suspension Compared to Betamethasone Dipropionate in the Topical Suspension Vehicle, Calcipotriol in the Topical Suspension Vehicle and the Topical Suspension Vehicle Alone in Psoriasis Vulgaris" Protocol LEO 80185-G23; 2010-2011.

183. Pfizer: "A Phase 3, Multi-Site, Open-label Study of the Long Term Safety and Tolerability of 2 Oral Doses of CP-690,550 in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol A3921061; 2010-2016.

184. Amgen:" A Study to Evaluate the Safety of Long-term Exposure with AMG 827 in Subjects with Moderate to Severe Plaque Psoriasis" Protocol 20090403; 2010-2016.

185. Inhibitex: "A Sub-Study of the Pain Reduction Profile of 40-49 Year Old Herpes Zoster Subjects Treated with Open-Label Valacyclovir Compared to Older Subjects in the Randomized, Double-Blind, Parallel-Group, Comparative Study" Protocol INH-FV1-005-AGE; 2010-2011.

186. AiCuris: "A Double-Blind Randomized Placebo Controlled Dose-Finding Trial to Investigate Different Doses of a New Antiviral Drug in Subjects with Genital HSV Type 2 Infection" Protocol AIC-316-01-II-01; 2010-2011.

187. Pfizer: "Prevalence of Psoriatic Arthritis in Adults with Psoriasis: An Estimate from Dermatology Practice" Protocol 0081A6-4728; 2010-2011.

188. Pfizer: "A Phase 3, Multi-site, Randomized, Mixed-Blind, Parallel-Group Treatment Withdrawal and Re-Treatment Study of the Efficacy and Safety of 2 Oral Doses of CP-690,550 in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol A3921111; 2010-2013.

189. Galderma: "A Multi-center, Randomized, Double-Blind, Placebo-Controlled, 3-Arm, Parallel Group Study Comparing the Efficacy and Safety of CD2475/101 40mg Tablets versus Placebo and Doxycycline 100mg Capsules Once Daily in the Treatment of Inflammatory Lesions in Subjects with Acne Vulgaris" Protocol RD.06.SPR.18195; 2010-2011.

190. Inhibitex:" A Phase II, Multicenter, Randomized, Double-Blind, Parallel-Group, Comparative Study of FV-100 vs. Valacyclovir in Patients with Herpes Zoster" Protocol INH-FV1-005; 2010-2011.

191. Celgene: "A Phase 3, Multi-Center, Randomized, Double-blind, Placebo-controlled, Parallel-Group, Efficacy and Safety Study of Two Doses of Apremilast (CC-10004) in Subjects with Active Psoriatic Arthritis and a Qualifying Psoriasis Lesions" Protocol CC-10004-PSA-004; 2011-2017.

192. Celgene: "A Phase 3, Multicenter, Randomized, Double-blind, Placebo-Controlled, Parallel-Group, Efficacy and Safety Study of Two Doses of Apremilast (CC-1004) in Subjects with Active Psoriatic Arthritis Who Have Not Been Previously Treated with Disease-Modifying Anti-Rheumatic Drugs" Protocol CC-10004-PSA-005; 2011-2017.

193. Celgene: "A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Efficacy and Safety Study of Two Doses Of Apremilast (CC-10004) In Subjects With Active Psoriatic Arthritis" Protocol CC-10004-PSA-002; 2011-2013.

194. Celgene: "A Phase 3, Multicenter, Randomized, Double-blind, Placebo-controlled, Efficacy and Safety Study of Apremilast (CC-10004) in Subjects with Moderate to Severe Plaque Psoriasis" Protocol CC-10004-PSOR-009; 2011-2017.

195. Centocor: "A Phase 2 Multicenter, Randomized, Placebo- and Active-Comparator-Controlled, Dose-Ranging Trial to Evaluate CNTO 1959 for the Treatment of Subjects with Moderate to Severe Plaque-type Psoriasis" Protocol CNTO1959PSO2001; 2011-2013.

196. Galderma: "A Phase 3 Randomized, Double-Blind, 12 Week Vehicle-Controlled, Parallel Group Study Assessing the Efficacy and Safety of CD5024 1 % Cream Versus Vehicle Cream in Subjects with Papulopustular Rosacea, Followed by a 40 Week Investigator Blinded Extension Comparing the Long-Term Safety of CD5024 1% Cream Versus Azelaic Acid 15 % gel" Protocol RD.06.SPR.1870; 2011-2012.

197. Galderma: "A Phase 3 Randomized, Double-Blind, 12 Week Vehicle-Controlled, Parallel Group Study Assessing the Efficacy and Safety of CD5024 1 % Cream Versus Vehicle Cream in Subjects with Papulopustular Rosacea, Followed by a 40 Week Investigator Blinded Extension Comparing the Long-Term Safety of CD5024 1% Cream Versus Azelaic Acid 15 % Gel" Protocol RD. 06. SPR.18171; 2011-2013.

198. Intendis: "A Double-Blind, Randomized, Vehicle-Controlled, Multi-Center, Multi-National, Parallel-Group Study of the Efficacy and Safety of ZK 245186 Ointment in Concentrations of 0.01, 0.03 and 0.1% Over 4 weeks in Patients with Atopic Dermatitis (AD)" Protocol 1403380; 2011-2012.

199. Maruho: "A Randomized, Placebo-Controlled, Double-Blind, Parallel Group, Multi-Center

Phase IIb Dose Finding Study of M518101 in Plaque Psoriasis Patients" Protocol M51801-US01; 2011-2012.

200. Novartis: "A Randomized, Double-blind, Placebo controlled, Multi-center Study of Subcutaneous Secukinumab to Demonstrate Efficacy after Twelve Weeks of Treatment, and to Assess the Safety, Tolerability and Long-Term Efficacy up to One Year in Subjects with Moderate to Severe Chronic Plaque-Type Psoriasis" Protocol CAIN457A2302; 2011-2013.

201. Nycomed: "Antiviral and Immunomodulatory Effects of Veregen (sinecatechins ointment, 15%) in Patients with External Genital Warts: An Investigator-Initiated, Open-Label, Mechanism of Action Study" Protocol AIR2010-44-1002-01 MOA; 2011-2012.

202. Pfizer: "A Phase 3, Multi-site, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study of the Efficacy and Safety of 2 Oral Doses of CP-650,550 in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol A3921078; 2011-2012.

203. Agenus: "A Phase 2a Multicenter, Double-blinded, Randomized Trial to Evaluate the Effect of HerpV on Viral Shedding in Adults with Recurrent Genital Herpes" Protocol C-400-02; 2012-2015.

204. Amgen: "An Open Label Study to Evaluate the Efficacy of Etancercept Treatment in Subjects with Moderate to Severe Plaque Psoriasis Who Have Lost a Satisfactory Response to Adalimumab" Protocol 20101145; 2012-2015.

205. Amgen: "A Phase 3 Study to Evaluate the Efficacy and Safety of Induction and Maintenance Regimens of Brodalumab Compared with Placebo and Ustekinumab in Subjects with Moderate to Severe Plaque Psoriasis" Protocol 20120104; 2012-2013.

206. Apo-Pharma: "A 12-week Randomized, Double-blind, Placebo-controlled, Multicenter, Multiple Sequential Dose Escalating Study to Evaluate the Safety, Tolerability, Pharmacokinetics, Pharmacodynamics, and Efficacy of Apo805K1 in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol AP03-2010; 2012-2013.

207. Asubio: "A Multicenter, Randomized, Placebo-Controlled, Double-Blind, Parallel-group Study to Evaluate the Efficacy, Safety, and Pharmacokinetics of ASB17061 Capsules in Adult Subjects with Atopic Dermatitis" Protocol ASBI 704; 2012-2014.

208. Celgene:" A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Efficacy and Safety Study of Apremilast (CC-10004) in Subjects with Moderate to Severe Plaque Psoriasis" Protocol CC-10004-PSOR-008; 2012-2015.

209. Galderma: "A Randomized, Multi-center, Investigator-blind, Vehicle- and Active-controlled, Phase 2 Study to Assess the Efficacy and Safety of Different Concentrations of CD5789 Cream Applied Once Daily in Subjects with Moderate to Severe Acne Vulgaris" Protocol RD.06.SPR.18223; 2012-2013.

210. Genocea: "A Phase I/IIa, Randomized, Double-blind, Dose-ranging, Placebo-controlled Study of the Safety and Immunogenicity of a HSV-2 Vaccine Containing Matrix M-2 Adjuvant in Individuals with Documented Genital HSV-2 Genital Infection" Protocol GEN-003-001; 2012-2016.

211. Idera: "A Randomized, Double-Blind, Placebo-Controlled, 4-week Trial of IMO-3100 in Patients with Moderate to Severe Plaque Psoriasis" Protocol 3100-202; 2012-2013.

212. Leo Pharma: "A Sequential Treatment Regimen of Cryotherapy and Picato® for the Treatment of Actinic Keratosis on the Face and Scalp" Protocol LP0041-21; 2012-2013.

213. Medicis: "A Parallel-group, Vehicle-controlled, Randomized, Double-blind Study of the Efficacy and Safety of Product 49778 and Product 10156 in Subjects with Seborrheic Dermatitis" Protocol MP-1001-01; 2012-2013.

214. Novum: "A Randomized, Double-Blind, Placebo-Controlled, Multiple-Site, Study Comparing Metronidazole Topical Gel 1% (Taro Pharmaceutical Industries, Ltd.) to METROGEL (metronidazole gel) 1% (Galderma) in the Treatment of Moderate to Severe Rosacea" Protocol 71142601; 2012-2013.

215. Pfizer: "A Phase 3, Multi-site, Randomized, Double-Blind, Placebo-Controlled, Parallel-group Study of the Efficacy and Safety of 2 Oral Doses of CP-690,550 in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol A3921079; 2012-2013.

216. Allergan: "A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-group Study of the Safety and Efficacy of a Single Treatment of AGN-214868 in Patients with Postherpetic Neuralgia" Protocol AGN 214868-007; 2013-2014.

217. Allergan: "A Safety and Efficacy Study to Compare Dapsone Dermal Gel with Vehicle Control in Patients with Acne Vulgaris" Protocol 225678-007; 2013-2014.

218. Amgen: "A Phase 3 Study to Evaluate the Efficacy and Safety of Induction and Maintenance Regimens of Brodalumab Compared with Placebo and Ustekinumab in Subjects with Moderate to Severe Plaque Psoriasis" Protocol 20120103; 2013-2015.

219. Bayer: "A Randomized, Double-blind, Vehicle-controlled, Multicenter, Parallel-group Clinical Trial to Assess the Safety and Efficacy of Azelaic Acid Foam, 15% Topically Applied Twice Daily for 12 Weeks in Subjects with Papulopustular Rosacea" Protocol 1401846; 2013-2014.

220. Leo Pharma: "Safety and Efficacy of Escalating Doses of Ingenol Mebutate Once Daily for Two or Three Consecutive Days when Used on Full Face, Full Balding Scalp or Approximately 250 Cm2 on the Chest in Subjects with Actinic Keratosis" Protocol LP0105-1012; 2013-2014.

221. Leo Pharma: "An Observational Study to Assess Patient Satisfaction and Control of Psoriasis with Calcipotriene/Betamethasone Dipropionate (Taclonex®) Topical Suspension, and Effect on Quality of Life" Protocol APPEAL; 2013-2014.

222. Maruho: "A Randomized, Vehicle Controlled, Double Blind, Parallel Group, Multi Center Phase III Study to Evaluate the Safety and Efficacy of M518101 in Subjects with Plaque Psoriasis" Protocol M518101-US02; 2013-2015.

223. Merck: "A 64-Week, Phase 3, Randomized, Placebo-Controlled, Parallel Design Study to Evaluate the Efficacy and Safety/Tolerability of Subcutaneous SCH 900222/MK-3222, Followed by an Optional Long-Term Safety Extension Study, in Subjects with Moderate-to-Severe Chronic Plaque Psoriasis" Protocol MK-3222-010; 2013-2020.

224. Novartis: "Phase II Randomized Double Blinded Placebo Controlled, Multiple-dose Regimen Study to Assess the Rate of Histological Clearance and Effect on Molecular Pathways as Well as on Biomarkers of 12 Months Secukinumab 300 mg s.c. Treated Patients with Chronic Plaque-type Psoriasis" Protocol CAIN457A2223; 2013-2015.

225. Novartis: "A Randomized, Double-blind, Placebo Controlled, Multicenter Study of Subcutaneous Secukinumab in Prefilled Syringes to Demonstrate Efficacy After Twelve Weeks of Treatment, and to Assess the Safety, Tolerability, Usability and Long-term Efficacy in Subjects with Chronic Plaque-type Psoriasis" Protocol CAIN457A2308; 2013-2017.

226. Novartis: "A Multicenter, Double-blind, Randomized Withdrawal Extension Study of Subcutaneous Secukinumab in Prefilled Syringes to Demonstrate Long-term Efficacy, Safety, and Tolerability up to 2 Years in Subjects with Moderate to Severe Chronic Plaque-type Psoriasis Completing Preceding Psoriasis Phase III Studies With Secukinumab" Protocol CAIN457A2302E1; 2013-2017.

227. Pfizer: "An Exploratory Phase 2A, Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Assess Mechanism of Action (MOA) Of CP-690,550 in the Skin when Administered Orally at 10 Mg Twice Daily (BID) for 12 Weeks in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol A3921147; 2013-2016.

228. Promius Pharma: "A Randomized, Double-Blind, Vehicle-Controlled, Multicenter, Parallel Group Study of the Efficacy and Safety of Betamethasone Dipropionate Spray 0.05% in the Treatment of Moderate Plaque Psoriasis" Protocol BDS1206; 2013-2016.

229. Regeneron: "A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Dose-Ranging Study Investigating the Efficacy, Safety, Pharmacokinetic and Biomarker Profiles of REGN668 Administered to Adult Patients with Moderate-to-Severe Atopic Dermatitis" Protocol R668-AD-1021; 2013-2014.

230. Regeneron: "An Open-label Study of Dupilumab in Patients with Atopic Dermatitis Who Participated in Previous Dupilumab Clinical Trials" Protocol R668-AD-1225; 2013-2017.

231. Vical: "A Randomized, Double-Blind, Placebo-Controlled, Dose-Escalation, Phase 1/2 Trial to Evaluate the Safety and Efficacy of Herpes Simplex Virus, Type 2 Therapeutic DNA Vaccines in Symptomatic HSV-2-Seropositive Adults" Protocol HSV2-101; 2013-2016.

232. Actavis: "A Randomized, Multicenter, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of 1.5mg/Kg Per Day of Sarecycline Compared to Placebo in the Treatment of Acne Vulgaris" Protocol SC1401; 2014-2017.

233. Actavis: "A Randomized, Multicenter, Double-blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of 1.5 mg/kg Per Day of Sarecycline Compared to Placebo in the Treatment of Acne Vulgaris" Protocol SC1402; 2014-2017.

234. Amgen: "A Comparison of Psoriasis Symptom Severity and Health-Related Quality of Life in Patients with Clear and Almost Clear Levels of Skin Improvement" Protocol 20130127 (HRA 1889A); 2014-2016.

235. Amgen: "A Prospective, Observational Study to Estimate the Proportion of Subjects with Plaque Psoriasis who Achieve Complete Clearance on Biologics" Protocol 20120363; 2014-2016.

236. Anacor: "A Multicenter, Randomized, Double-Blind, Vehicle-Controlled Study of the Safety and Efficacy of AN2728 Topical Ointment, 2% in Children, Adolescents, and Adults (Ages 2 Years and Older) With Atopic Dermatitis" Protocol AN2728-AD-302; 2014-2015.

237. Boehringer-Ingelheim: "A 48 Weeks Study of Three Different Dose Regimens of BI 655066

Administered Subcutaneously in Patients with Moderate to Severe Chronic Plaque Psoriasis (Randomised, Dose-Ranging, Active-Comparator Controlled (Ustekinumab), Double-Blind within Dose Groups of BI 655066)" Protocol 1311.2; 2014-2015.

238. Coherus: "A Double-Blind, Randomized, Parallel-Group, Active-Control Study to Compare the Efficacy and Safety of CHS-0214 versus Enbrel in Subjects with Chronic Plaque Psoriasis (RaPsOdy)" Protocol CHS-0214-04; 2014-2016.

239. Dermira: "A Phase 3 Multicenter, Randomized, Double Blind, Parallel Group Study Followed by Dose Blind Period and Open Label Follow Up to Evaluate Efficacy and Safety of Certolizumab Pegol in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol PS0005; 2014-2019.

240. Genocea: "A Randomized, Double-Blind, Factorial Study to Compare the Safety and Efficacy of Varying Combinations of GEN-003 and Matrix-M2 in Subjects with Genital HSV-2 Infection" Protocol GEN-003-002; 2014-2016.

241. Janssen Research & Development, LLC: "Exploratory Genetic Study in Subjects with Moderate to Severe Psoriasis" Protocol NOCOMPOUNDPSO0001; 2014.

242. Janssen Research & Development, LLC: "Phase 3, Multicenter, Randomized, Double-blind, Placebo and Active Comparator-controlled Study Evaluating the Efficacy and Safety of Guselkumab in the Treatment of Subjects with Moderate to Severe Plaque-type Psoriasis" Protocol CNTO1959PSO3001; 2014-2020.

243. Janssen Research & Development, LLC: "A Phase 3, Multicenter, Randomized, Double-blind, Placebo and Active Comparator-controlled Study Evaluating the Efficacy and Safety of Guselkumab for the Treatment of Subjects with Moderate to Severe Plaque-type Psoriasis with Randomized Withdrawal and Retreatment" Protocol CNTO1959PSO3002; 2014-2020.

244. Janssen Research & Development, LLC: "A Phase 3, Multicenter, Randomized, Double-blind Study to Evaluate the Efficacy and Safety of Guselkumab for the Treatment of Subjects with Moderate to Severe Plaque-type Psoriasis and an Inadequate Response to Ustekinumab" Protocol CNTO1959PSO3003; 2014-2016.

245. LEO Pharma: "Safety and Efficacy of Escalating Doses of LEO 43204 Applied Once Daily for Two Consecutive Days on Full Balding Scalp in Subjects with Actinic Keratosis" Protocol LP0084-1014; 2014-2015.

246. Novartis: "A Randomized, Double-blind, Placebo-controlled, Multicenter, Study to Demonstrate the Efficacy at 16 Weeks of Secukinumab 150 and 300 mg s.c. and to Assess Safety, Tolerability and Long-term Efficacy up to 80 Weeks in Subjects with Moderate to Severe Nail Psoriasis" Protocol CAIN457A2313; 2014-2017.

247. Novartis: "A 52-week, Multicenter, Randomized, Double-Blind Study of Subcutaneous Secukinumab to Demonstrate Efficacy as Assessed by Psoriasis Area and Severity Index at 16 Weeks of Treatment Compared to Ustekinumab and to Assess Long-Term Safety, Tolerability and Efficacy in Subjects with Moderate to Severe Plaque Psoriasis" Protocol CAIN457A2317; 2014-2017.

248. Otsuka: "A Phase 2 Multi-center, Randomized, Double-blind, Vehicle-controlled, Three-arm, Parallel Group Study to Assess the Safety, Tolerability, and Efficacy of Topical OPA-15406 Ointment, in Subjects with Mild/Moderate Atopic Dermatitis" Protocol 271-12-205; 2014-2015.

249. Pfizer: "A Phase 2, Randomized, Double-blind, Placebo-controlled Study to Evaluate Safety and Efficacy of PF-04965842 in Subjects with Moderate to Severe Psoriasis" Protocol B7451005; 2014-2016.

250. Promius Pharma: "A Randomized, Parallel, Open Label, Multicenter Study to Assess the Potential for Adrenal Suppression and Systemic Drug Absorption Following Multiple Dosing with Betamethasone Dipropionate Spray 0.05% versus Diprolene® (augmented betamethasone dipropionate) Lotion 0.05% in Subjects with Moderate to Severe Plaque Psoriasis" Protocol BDS1307; 2014-2016.

251. Promius Pharma: "A Randomized, Double-Blind, Vehicle-Controlled, Multicenter, Parallel Group Study of the Safety of Betamethasone Dipropionate Spray 0.05% versus Diprolene® (Augmented Betamethasone Dipropionate) Lotion 0.05% and the Efficacy of Betamethasone Dipropionate Spray 0.05% versus Vehicle Spray in the Treatment of Moderate Plaque Psoriasis" Protocol BDS1205; 2014-2016.

252. Regeneron: "A Randomized, Double-Blind, Placebo-Controlled, Study Investigating Vaccine Responses in Adults with Moderate to Severe Atopic Dermatitis Treated with Dupilumab" Protocol R668-AD-1314; 2014-2015.

253. Sandoz: "A Randomized, Double-blind, Multicenter Study to Demonstrate Equivalent Efficacy and to Compare Safety and Immunogenicity of a Biosimilar Adalimumab (GP2017) and Humira® in Patients with Moderate to Severe Chronic Plaque-type Psoriasis" Protocol GP17-301; 2014-2016.

254. Actavis: "A Multi-Center Open-Label Evaluation of the Safety of Sarecycline Tablets in the Treatment of Acne Vulgaris" Protocol SC1403; 2015-2016.

255. Boehringer Ingelheim: "An Open Label Extension Trial Assessing the Safety and Efficacy of BI 655066 Administered Subcutaneously in Patients with Moderate to Severe Chronic Plaque Psoriasis" Protocol 1311.13; 2015-2018.

256. Coherus: "A Double- Blind, Randomized, Parallel- Group, Active- Control Study to Compare the Efficacy and Safety of CHS- 1420 Versus Humira in Subjects with Chronic Plaque Psoriasis" Protocol CHS-1420-02; 2015-2017.

257. Contravir: "A Multicenter, Randomized, Double- Blind, Parallel- Group, Comparative Study of FV-100 vs. Valacyclovir for the Prevention of Post- Herpetic Neuralgia and Treatment of Acute Herpes Zoster- Associated Pain" Protocol CTRV-FV-2-007; 2015-2017.

258. Cutanea: "A Phase 2, Randomized, Double- Blind, Vehicle-Controlled, Parallel Group Multicenter Study to Evaluate the Safety and Efficacy of CLS001 Topical Gel versus Vehicle Applied Once Daily for 12 Weeks to Female Subjects with Moderate to Severe Acne Vulgaris" Protocol CLS001-CO-PR-009; 2015-2016.

259. Dermira: "A Phase 2, Randomized, Double-Blind, Vehicle-Controlled, Dose-Ranging, Study of DRM01B Topical Gel in Subjects with Acne Vulgaris" Protocol DRM01B-ACN02; 2015-2016.

260. Dermira/UCB Biopharma: "A Phase 3, Multicenter, Randomized, Double-Blind, Parallel-Group, Placebo and Active-Controlled Study Followed by a Placebo-Controlled Maintenance Period and Open-Label Follow-Up to Evaluate the Efficacy and Safety of Certolizumab Pegol in Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol PS0003; 2015-2017.

261. Eli Lilly: "A Multicenter, Randomized, Double- Blind Study Comparing the Efficacy and Safety of Ixekizumab Dosing Regimens in Patients with Moderate to Severe Plaque Psoriasis" Protocol I1F-MC- RHBP(a); 2015-2017.

262. Galderma: "A Multicenter, Randomized, Double- Blind, Parallel- Group Vehicle Controlled Study to Compare the Efficacy and Safety of CD5789 Cream Versus Vehicle Cream in Subjects with Acne Vulgaris" Protocol RD.06.SPR.18252; 2015- 2017.

263. Genentech: "An Open-Label Phase II Study to Evaluate the Safety of Lebrikizumab Compared to Topical Corticosteroids in Adult Patients with Persistent, Moderate to Severe Atopic Dermatitis" Protocol GS29735; 2015-2016.

264. Genocea: "Rollover Trial for Placebo Subjects Previously Enrolled into GEN-003-002 - A Randomized, Double-Blind, Factorial Study to Compare the Safety and Efficacy of Varying Combinations of GEN-003 and Matrix-M2 in Subjects with Genital HSV-2 Infection" Protocol GEN-003-002a; 2015-2016.

265. GlaxoSmithKline: "A Randomized, Blinded, Vehicle- Controlled, Dose- Finding Study of GSK 2894512 Cream for the Treatment of Atopic Dermatitis" Protocol 203121; 2015-2017.

266. GlaxoSmithKline: "A Randomized, Blinded, Vehicle- Controlled, Dose- Finding Study of GSK 2894512 Cream for the Treatment of Plaque Psoriasis" Protocol 203120; 2015-2016.

267. Hologic: "Clinical Evaluation of the Aptima Herpes Simplex Viruses 1 & 2 Assay on the Panther System in Swab Specimens from Symptomatic Subjects Presenting with a Suspected Herpes Lesion(s)" Protocol A10921-HSVPS-CSP-01; 2015-2016.

268. LEO Pharma: "Safety of LEO 43204 0.018%, 0.037% and 0.1% for Actinic Keratosis Applied Once Daily for Three Consecutive Days on Face/Chest, Scalp and Trunk/Extremities, Respectively" Protocol LP0084-1148; 2015-2016.

269. LEO Pharma: "Efficacy and Safety of Ingenol Mebutate Gel in Field Treatment of Actinic Keratosis on Full Face, Balding Scalp or Approximately 250 cm2 on the Chest" Protocol LP0105-1032; 2015-2017.

270. LEO Pharma: "Efficacy and Safety of LEO 43204 in Field Treatment of Actinic Keratosis on Face or Chest Including 12-Month Follow-up" Protocol LP0084-1193; 2015-2018.

271. LEO Pharma: "Efficacy and Safety of LEO 43204 in Field Treatment of Actinic Keratosis on Balding Scalp Including 12- Month Follow-up" Protocol LP0084-1195; 2015-2017.

272. Medimmune: "A Phase 2b, Randomized, Double-blinded, Placebo-Controlled, Dose-Ranging Study to Evaluate the Efficacy and Safety of Tralokinumab in Adult Subjects with Moderate-to-Severe Atopic Dermatitis" Protocol D2213C00001; 2015-2016.

273. Novan: "A Phase 2 Multi-Center, Double- Blind, Randomized, Vehicle- Controlled, Ascending Dose Study assessing Tolerability, Safety, and Efficacy of Topical NVN1000 in Subjects with External Genital Warts and Perianal Warts" Protocol NI-WA201; 2015-2016.

274. Novartis: "A Randomized, Vehicle Controlled, Active Comparator, Parallel Group Study to Evaluate Efficacy, Safety, and Tolerability of Topical LFX453 Formulations in Patients with External Genital Warts (EGWs)" Protocol CLFX453X2202; 2015-2016.

275. Novartis: "An Open-Label, Single Sequence Crossover, Study Investigating the Influence of Secukinumab Treatment on the Pharmacokinetics of Midazolam as a Cyp3a4 Substrate in Patients with Moderate-to-Severe Plaque Psoriasis" Protocol CAIN457A2110; 2015-2017.

276. Polynoma: "A Multicenter, Double-blind, Placebo-controlled, Adaptive Phase 3 Trial of POL-103A Polyvalent Melanoma Vaccine in Post-resection Melanoma Patients with a High Risk of Recurrence" Protocol POL-103A; 2015-2021.

277. Regeneron: "A Phase 3, Randomized, Double-Blind, Placebo-Controlled Study Investigating the Efficacy and Safety of Multiple Dupilumab Dose Regimens Administered as Monotherapy for Maintaining Treatment Response in Patients with Atopic Dermatitis" Protocol R668-AD-1415; 2015-2017.

278. Regeneron: "A Phase 3 Confirmatory Study Investigating the Efficacy and Safety of Dupilumab Monotherapy Administered to Adult Patients with Moderate-to-Severe Atopic Dermatitis" Protocol R668-AD-1416; 2015-2016.

279. Tolmar: "A Double-blind, Randomized, Parallel-group, Vehicle-controlled, Multicenter Study Comparing TOLMAR Calcipotriene Ointment, 0.005% to Reference Listed Drug in the Treatment of Plaque Psoriasis" Protocol TOL2707A; 2015-2016.

280. Valeant: "A Phase 3, Multi- Center, Randomized, Double- Blind, Vehicle- Controlled, 2- Arm, Parallel Group Comparison Study Comparing the Efficacy and Safety of IDP-121 and IDP-121 Vehicle Lotion in the Treatment of Acne Vulgaris" Protocol V01-121A-301; 2015-2017.

281. Valeant: "A Phase 3, Multicenter, Open Label Study to Evaluate the Long- Term Safety of IDP-118 Lotion in the Treatment of Plaque Psoriasis" Protocol V01-118A-303; 2015-2017.

282. Valeant: "A Phase 3, Multicenter, Double- Blind, Randomized, Vehicle Controlled Clinical Study to Assess the Safety and Efficacy of IDP-118 in the Treatment of Plaque Psoriasis" Protocol V01-118A-302; 2015-2016.

283. Vitae Pharmaceuticals: "A Randomized, double- Blind, Placebo- controlled Ascending Multiple Dose Study to Assess the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of VTP-43742 in Health Volunteers and Proof-of- Concept in Psoriatic Patients" Protocol VTP43742-002; 2015-2016.

284. Abbvie: "A Phase 2b Multicenter, Randomized, Placebo-Controlled, Double-Blind Dose-Ranging Study to Evaluate ABT-494 in Adult Subjects with Moderate to Severe Atopic Dermatitis" Protocol M16-048; 2016-2019.

285. AbbVie: "BI 655066/ABBV-066 (Risankizumab) Versus Adalimumab in a Randomized, Double Blind, Parallel Group Trial in Moderate to Severe Plaque Psoriasis to Assess Safety and Efficacy after 16 Weeks of Treatment and after Inadequate Adalimumab Treatment Response (IMMvent)" Protocol 1311.30; 2016-2017.

286. Boehringer Ingelheim: "BI 655066 Versus Placebo in a Multicenter Randomized Double-Blind Study in Patients with Moderate to Severe Chronic Plaque Psoriasis Evaluating the Efficacy and Safety with Randomized Withdrawal and Re-Treatment" Protocol BIPI 1311.4; 2016- 2018.

287. Boehringer Ingelheim: "BI 655066 Versus Ustekinumab and Placebo Comparators in a Randomized Double-Blind Trials for Maintenance Use in Moderate to Severe Plaque-Type

Psoriasis" Protocol BIPI 1311.3; 2016-2018.

288. Boehringer Ingelheim: "BI 655066/ABBV-066 (Risankizumab) Versus Adalimumab in a Randomized, Double Blind, Parallel Group Trial in Moderate to Severe Plaque Psoriasis to Assess Safety and Efficacy After 16 Weeks of Treatment and After Inadequate Adalimumab Treatment Response (IMMvent)" Protocol BI1311.30; 2016-2017.

289. Cutanea: A Phase 3 Open-Label Extension Study to Evaluate the Long-Term Safety of Omiganan Topical Gel in Subjects with Rosacea" Protocol CLS001-CO-PR-006; 2016-2018.

290. Eli Lilly: "A Randomized, Double- Blind, Placebo- Controlled, Phase 2 Study to Evaluate the Safety and Efficacy of Baricitinib in Patients with Moderate- to- Severe Atopic Dermatitis" Protocol I4V-MC-JAHG (a); 2016-2017.

291. Genocea: "A Long-term Follow-up Study of Efficacy and Immunogenicity of GEN-003 in Subjects with Genital Herpes Simplex Virus Type 2 (HSV-2) Infection" Protocol GEN-003-002b; 2016-2017.

292. Glenmark: "A Phase 2a, Double-Blind, Randomized, Placebo-controlled, Exploratory Study to Evaluate the Safety, Biological Activity and Pharmacokinetics of GBR 830 in Adult Patients with Moderate-to-Severe Atopic Dermatitis" Protocol GBR 830-201; 2016-2017.

293. Incyte: "INCB 18424-206: "A Phase 2, Randomized, Dose-Ranging, Vehicle-Controlled and Triamcinolone 0.1% Cream-Controlled Study to Evaluate the Safety and Efficacy of INCB018424 Phosphate Cream Applied Topically to Adults with Atopic Dermatitis" Protocol INCB18424-206; 2016-2018.

294. Leo Pharma: "A Phase 3 Trial Comparing the Efficacy and Safety of LEO 90100 Aerosol Foam with the Aerosol Foam Vehicle Used Twice Weekly as Long-Term Maintenance Therapy in Subjects with Psoriasis Vulgaris. A 12-Month, International, Multi-Centre, Randomised, Vehicle Controlled, Double-Blind, 2-Arm, Parallel Group Trial" Protocol LP0053-1004; 2016-2019.

295. Novartis: A Randomized, Double- Blind, Placebo- Controlled, Parallel- Group, Multicenter Study to Evaluate the Effect of Secukinumab on Aortic Vascular Inflammation and Cardiometabolic Biomarkers after 12 Weeks of Treatment, Compared to Placebo, and up to 52 Weeks of Treatment with Secukinumab in Adult Subjects with Moderate to Severe Chronic Plaque-Type Psoriasis" Protocol CAIN457AUS02; 2016-2017.

296. Novartis Pharmaceuticals: "A Randomized, Double-blind, Placebo-Controlled, Parallel-Group, Multicenter Study to Evaluate the Effect of Secukinumab on Aortic Vascular Inflammation and Cardiometabolic Biomarkers After 12 Weeks of Treatment, Compared to Placebo, and up to 52 Weeks of Treatment with Secukinumab in Adult Subjects With Moderate to Severe Chronic Plaque-type Psoriasis" Protocol CAIN457AUS02 (VIP-S); 2016-2018.

297. UCB Biopharma: "A Multicenter, 48-Week, Open-Label Extension Study to Assess the Long-Term Safety, Tolerability, and Efficacy of Bimekizumab in Adult Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol PS0011; 2016-2018.

298. UCB Biopharma: "A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Dose Ranging Study to Evaluate the Safety, Efficacy, Pharmacokinetics, and Pharmacodynamics of Bimekizumab in Adult Subjects with Moderate to Severe Chronic Plaque Psoriasis; Phase 2b" Protocol PS0010; 2016-2017.

299. Valeant: "A Phase 2, Multicenter, Evaluator-Blinded, Randomized, Vehicle-Controlled Study to Compare the Safety and Efficacy of IDP-118 Lotion with Tazorac® (tazarotene) Cream, 0.05% in the Treatment of Plaque Psoriasis" Protocol V01-118A-202; 2016-2017.

300. Valeant: "A Phase 2, Multi-Center, Double-Blind, Randomized, Vehicle-Controlled Study to Compare the Safety and Efficacy of IDP-122 Lotion to Ultravate® (Halobetasol Propionate) Cream, 0.05% in the Treatment of Plaque Psoriasis" Protocol V01-122A-203; 2016-2017.

301. Aclaris: "A Randomized, Double-Blind, Vehicle-Controlled, Parallel Group Study of A-101 Topical Solution Applied Twice a Week in Subjects with Common Warts" Protocol A-101-WART-203; 2017-2018.

302. Abbvie: A Multicenter, Open Label Study to Assess the Safety and Efficacy of Risankizumab for Maintenance in Moderate to Severe Plaque Type Psoriasis (LIMMITLESS)" Protocol M15-997; 2017-2024.

303. Asana: "A Randomized, Double-Blind, Placebo-Controlled, Sequential, Multiple-Dose Escalation Study to Evaluate the Safety, Tolerability, Pharmacokinetics and Preliminary Efficacy of ASN002 in Subjects with Moderate-to-Severe Atopic Dermatitis" Protocol ASN002AD-01; 2017-2018.

304. Athenex: "A Phase 3, Double-Blind, Vehicle-Controlled, Randomized, Parallel Group, Multicenter, Efficacy and Safety Study of KX2-391 Ointment 1% in Adult Subjects with Actinic Keratosis on the Face or Scalp" Protocol KX01-AK-003; 2017-2019.

305. Boehringer Ingelheim: "VOLTAIRE-X: Pharmacokinetics, Safety, Immunogenicity and Efficacy of BI 695501 Versus Humira® in Patients with Moderate to Severe Chronic Plaque Psoriasis: A Randomized, Double-Blind, Parallel-Arm, Multiple-Dose, Active Comparator Trial" Protocol 1297.9; 2017-2019.

306. Boehringer Ingelheim: "An Open Label Extension Trial Assessing the Safety and Efficacy of BI 655066/ABBV-066/Risankizumab Administered Subcutaneously in Patients with Moderate to Severe Chronic Plaque Psoriasis" Protocol 1311.13; 2017-2018.

307. Celgene: "A Phase 3, Multi-Center, Randomized, Placebo-Controlled, Double-Blind Study of the Efficacy and Safety of Apremilast (CC-10004) in Subjects with Moderate to Severe Plaque Psoriasis of the Scalp" Protocol CC-10004-SPSO-001; 2017-2019.

308. Cellceutix: "A Randomized, Double Blind, Parallel Group, Placebo-controlled Trial to Study the Efficacy and Safety of Two Oral Doses of Prurisol Administered Twice Daily for Twelve Weeks to Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol CTIX-PRU-005; 2017-2018.

309. Columbia University Medical Center: "A Tissue Repository for the Collection of Samples from Patients with Cutaneous T-Cell Lymphoma and Healthy Volunteers" Protocol AAAQ8751; 2017-2018

310. Corrona: "Corrona Psoriasis (PSO) Registry" Protocol PSO-500; 2017-2024.

311. Foamix: "A Randomized, Multicenter, Double-blind, Vehicle-Controlled Study to Evaluate the Safety and Efficacy of FMX103 1.5% Topical Minocycline Foam Compared to Vehicle in the

Treatment of Facial Papulopustular Rosacea" Protocol FX2016-12; 2017-2018.

312. Foamix: "An Open-Label Study to Evaluate the Long-Term Safety of Topical Administration of FMX103 for 40 weeks in the Treatment of Moderate to Severe Facial Papulopustular Rosacea" Protocol FX2016-13; 2017-2019.

313. Foamix: "A Randomized, Double-Blind, Vehicle-Controlled Study to Evaluate the Efficacy and Safety of Topical Administration of FMX101 for 12 Weeks in the Treatment of Moderate-to-Severe Acne Vulgaris" Protocol FX2017-22; 2017-2018.

314. Incyte Corporation: "A Phase 2, Randomized, Dose-Ranging, Vehicle-Controlled and Triamcinolone 0.1% Cream-Controlled Study to Evaluate the Safety and Efficacy of INCBO 18424 Phosphate Cream Applied Topically to Adults with Atopic Dermatitis" Protocol INCB18424-206; 2017-2018.

315. Janssen Research & Development, LLC: "A Phase 3, Multicenter, Randomized, Double-blind, Placebo and Active Comparator-controlled Study Evaluating the Efficacy and Safety of Guselkumab for the Treatment of Subjects with Moderate to Severe Plaque-type Psoriasis with Randomized Withdrawal and Retreatment" CNTO1959PSO3002; 2017-2020.

316. Kiniksa: "A Phase Ib, Double-Blind, Randomized, Placebo-Controlled Study to Assess the Safety, Tolerability, and Pharmacokinetics of Single Ascending Doses of KPL-716" Protocol KPL-716-C001; 2017-2019.

317. LEO Pharma: "A Phase 3 Trial to Compare the Incidence of SCC and Other Skin Neoplasia on Skin Areas Treated with Ingenol Disoxate Gel or Vehicle Gel for Actinic Keratosis on Face and Chest or Scalp. A Multi-Centre, Randomised, Open-Label, Controlled, Parallel Group, 24-Month Trial" Protocol LP0084-1369; 2017-2018.

318. LEO Pharma: "A Randomised, Double-Blind, Placebo-Controlled, Phase 3 Trial to Evaluate the Efficacy and Safety of Tralokinumab Monotherapy in Subjects with Moderate-to-Severe Atopic Dermatitis Who are Candidates for Systemic Therapy" Protocol LP0162-1325; 2017-2019.

319. LEO Pharma: "Picato for the Treatment of Molluscum Contagiosum in Immunocompromised Patients" Protocol IIS-PICATO-1386; 2017-2018.

320. LEO Pharma: "Tralokinumab Monotherapy for Moderate-to-Severe Atopic Dermatitis - ECZTRA 1" Protocol LP0162-1325; 2017-2020.

321. MC2 Therapeutics: "A Randomised, Multicenter, Investigator-Blind, Parallel-Group Trial to Evaluate the Efficacy and Safety of MC2-01 Cream Compared to Vehicle and Active Comparator in Subjects with Mild-to-Moderate Psoriasis Vulgaris" Protocol MC2-01C2; 2017-2018.

322. Menlo Therapeutics: "A Randomized, Double-Blind, Placebo-Controlled Study of the Efficacy, Safety, and Tolerability of Serlopitant for the Treatment of Pruritus in Adults with Plaque Psoriasis" Protocol MTI-109; 2017-2018.

323. Merck Sharp & Dohme Corporation: "A 64-Week, Phase 3, Randomized, Placebo-Controlled, Parallel Design Study to Evaluate the Efficacy and Safety/Tolerability of Subcutaneous Tildrakizumab (SCH 900222/MK-3222), Followed by an Optional Long-Term Safety Extension Study, in Subjects with Moderate-to-Severe Chronic Plaque Psoriasis" Protocol MK-3222-010; 2017-2020.

324. Novartis: "A Multicenter, Randomized, Double-Blind, Placebo-Controlled, 52-Weeks Study to Demonstrate the Efficacy, Safety and Tolerability of Subcutaneous Secukinumab Injections with 2mL Pre-Filled Syringes (300 mg) in Adult Subjects with Moderate to Severe Plaque Psoriasis" Protocol CAIN457A2323; 2017-2018.

325. Novartis: "A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Multicenter Study to Explore Changes in Subcutaneous Adipose Tissue and Modulation of Skin Inflammation after 12 Weeks of Treatment with Secukinumab, Compared to Placebo, And Up To 52 Weeks of Treatment with Secukinumab in Adult Patients with Moderate to Severe Plaque Psoriasis (Obepso-S)" Protocol CAIN457AUS07; 2017-2019.

326. Pfizer: "A Phase 2a, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate Safety and Efficacy of PF-06700841 in Subjects with Moderate to Severe Plaque Psoriasis" Protocol B7931004; 2017-2018.

327. Regeneron: "Phase 1b; An Open-Label, Randomized, Actual Use Study of Dupilumab Auto-Injector Device in Patients with Atopic Dermatitis" Protocol R668-AD-1607; 2017-2018.

328. Roivant (Innovaderm): Phase 2 Study of RVT-501 in Adult and Adolescent Subjects with Atopic Dermatitis" Protocol RVT-501-2001; 2017.

329. Topstone: "A Randomised, Double-blind, Vehicle-Controlled, Phase IIb Study to Assess the Efficacy and Safety of Topically Applied DS107 Cream to Adults with Mild to Moderate Atopic Dermatitis" Protocol DS107E-06; 2017-2018.

330. UCB Biopharma S.P.R.L.: "A Multicenter, 48-Week, Double-Blind, Placebo-Controlled, Parallel Group Extension Study to Assess the Long-Term Safety, Tolerability, and Efficacy of Bimekizumab in Adult Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol PS0011; 2017-2018.

331. Valeant: "A Phase 3, Multi-Center, Randomized, Double-Blind, Vehicle-Controlled, 2 Arm, Parallel Group Study Comparing the Safety and Efficacy of IDP-123 Lotion and IDP-123 Vehicle Lotion in the Treatment of Acne Vulgaris" Protocol V01-123A-301; 2017.

332. AbbVie: "A Multicenter, Randomized, Open Label, Efficacy Assessor-Blinded Study of Risankizumab Compared to Secukinumab for the Treatment of Adult Subjects with Moderate to Severe Plaque Psoriasis who are Candidates for Systemic Therapy" Protocol M16-766; 2018-2020.

333. AbbVie: "Moderate to Severe Atopic Dermatitis: Evaluation of Upadacitinib in Combination with Topical Corticosteroids in Adolescent and Adult Subjects" Protocol M16-047; 2018-2024.

334. Aclaris Therapeutics: "A Randomized, Double-Blind, Vehicle-Controlled, Parallel Group Study of A- 101 Topical Solution Applied Twice a Week in Subjects with Common Warts" Protocol A-101-WART-302; 2018-2019.

335. Arcutis: "A Phase 2, Multicenter, Open-Label Extension Study of the Long-Term Safety of ARQ-151 Cream 0.3% in Adult Subjects with Chronic Plaque Psoriasis who have Completed Preceding Study ARQ-151-201 Phase 2 Randomized Controlled Trial (Cohort 1) and non-ARQ-151-201 Subjects (Cohort 2)" Protocol ARQ-151-202; 2018-2020.

336. Bond Avillion 2 Development LP: "A Phase 2b Randomized, Double-Blind, Placebo Controlled,

Multi-center 12-week Study with an Additional 40-week Follow-up Assessment of Efficacy, Safety and Tolerability of M l 095 in Subjects with Moderate to Severe Chronic Plaque-Type Psoriasis" Protocol 235619AV002; 2018-2020.

337. Bristol-Myers Squibb: "A Multi-Center, Randomized, Double-Blind, Placebo- and Active Comparator-Controlled Phase 3 Study to Evaluate the Efficacy and Safety of BMS-986165 in Subjects with Moderate-to-Severe Plaque Psoriasis" Protocol BMS POETYK PSO-1 (IM011-046); 2018-2020.

338. Celgene: "A Phase 3, Multicenter, Randomized, Placebo-Controlled, Double-Blind Study of the Efficacy and Safety of Apremilast (CC-10004) in Subjects with Moderate to Severe Genital Psoriasis" Protocol CC-10004-PSOR-025; 2018-2022.

339. Dermira: "A Randomized, Double-Blind, Placebo-Controlled, Dose-Ranging Trial to Evaluate the Efficacy and Safety of Lebrikizumab in Patients with Moderate-to-Severe Atopic Dermatitis" Protocol DRM06-AD01; 2018-2019.

340. Dr. Reddy's Laboratories: "A Randomized, Double-Blind, Placebo-Controlled, Multicenter, 24-Week Study to Assess the Efficacy and Safety of PPC-06 (Tepilamide Fumarate) Extended Release Tablets in Subjects with Moderate-to-Severe Plaque Psoriasis" Protocol PPC-06-CD-004; 2018-2019.

341. Eli Lilly and IQVIA: "Phase 2/3, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Study to Evaluate the Efficacy and Safety of Baricitinib in Adult Patients with Severe Alopecia Areata" Protocol I4V-MC-JAHO; 2018-2024.

342. Eli Lilly and IQVIA: "A 24-Week Multicenter, Randomized, Double-Blind, Parallel-Group Study Comparing the Efficacy and Safety of Ixekizumab to Guselkumab in Patients with Moderate to Severe Plague Psoriasis" Protocol I1F-MC-RHCR; 2018-2020.

343. Eli Lilly and IQVIA: "A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Phase 2 Study to Evaluate the Efficacy and Safety of LY3375880 in Adult Subjects with Moderate-to-Severe Atopic Dermatitis" Protocol I9N-MC-FCAB; 2018-2020.

344. Genentech (PPD): "A Phase II, Randomized, Double Blind, Placebo Controlled Multicenter Study to Assess the Efficacy and Safety of MSTT1041A in Patients with Moderate to Severe Atopic Dermatitis" Protocol GS40965; 2018-2020.

345. Glenmark: "A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study of GBR 830 in Adult Subjects with Moderate to Severe Atopic Dermatitis" Protocol GBR-830-204; 2018-2021.

346. Glenmark: "A Phase III, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Multiple-Site Study to Evaluate the Therapeutic Equivalence of a Generic Calcipotriene and Betamethasone Dipropionate Topical Foam, 0.005%/0.064% (Glenmark Pharmaceuticals Ltd) to the Marketed Product Enstilar® Foam (LEO Pharma Inc.) in the Treatment of Psoriasis Vulgaris (Plaque Psoriasis)" Protocol GLK-1801; 2018-2020.

347. Incyte (PPD): "A Phase 3, Double-Blind, Randomized, 8-Week, Vehicle-Controlled Efficacy and Safety Study of Ruxolitinib Cream Followed by a Long-Term Safety Extension Period in Adolescents and Adults with Atopic Dermatitis" Protocol INCB 18424-304; 2018-2021.

348. Kyowa Kirin Pharmaceutical: "A Phase 2, Multicenter, Randomized, Double-blind, Parallel-

group, Placebo-Controlled Study of an Anti-OX40 Monoclonal Antibody (KHK4083) in Subjects with Moderate to Severe Atopic Dermatitis (AD)" Protocol KHK4083-006 (237307); 2018-2021.

349. LEO Pharma A/S: "An Open-label, Single-Arm, Multi-Centre, Long-term Extension Trial to Evaluate the Safety and Efficacy of Tralokinumab in Subjects with Atopic Dermatitis Who Participated in Previous Tralokinumab Clinical Trials" Protocol LEO-1337; 2018-2023.

350. Menlo Therapeutics: "A Randomized, Double-Blind, Placebo Controlled Study of the Efficacy, Safety, and Tolerability of Serlopitant for the Treatment of Pruritus in Adults with Prurigo Nodularis" Protocol MTI-105; 2018-2020.

351. Menlo Therapeutics: "An Open-Label Long-Term Safety Study of Serlopitant for the Treatment of Pruritus" Protocol MTI-107; 2018-2020.

352. Novan: "A Phase 2 Multi-Center, Randomized, Double-Blind, Vehicle-Controlled, Ascending Dose Study of SB206 in Subjects with Molluscum Contagiosum" Protocol NI-MC201; 2018-2019.

353. Novartis: "Phase 3b; A Multicenter, Randomized, Double-Blind, Placebo-Controlled, 52-Week Study to Demonstrate the Efficacy, Safety and Tolerability of Subcutaneous Secukinumab Injections with 2 mL Auto-Injectors (300 mg) in Adult Subjects with Moderate to Severe Plaque Psoriasis – MATURE" Protocol AIN457A2325; 2018-2020.

354. Novartis: "A 16-week Randomized, Open-Label, Multicenter Study to Assess the Superiority of Secukinumab over Guselkumab in the Complete Treatment of Ustekinumab-Resistant Psoriatic Plaques – ARROW" Protocol CAIN457A2403 (240099 ARROW); 2018-2019.

355. Novartis: "Multi-center, Randomized, Double-Blind, Active and Placebo-Controlled Study to Investigate the Efficacy and Safety of Ligelizumab (QGE031) in the Treatment of Chronic Spontaneous Urticaria (CSU) in Adolescents and Adults Inadequately Controlled with H1-Antihistamines" Protocol CQGE031C2303 (Pearl 1 & 2; 2018-2020.

356. Novartis: "A Randomized, Double-Blind, Placebo-Controlled Multicenter Dose-Ranging Study to Assess the Safety and Efficacy of Multiple Oral ZPL389 Doses in Patients with Moderate to Severe Atopic Dermatitis (ZEST trial)" Protocol CZPL389A2203; 2018-2021.

357. Pfizer: "Phase 3 Atopic Dermatitis Study in Adults on Background Topical Therapy with Moderate to Severe AD" Protocol B7451029; 2018-2020.

358. Pfizer: "A Phase 3 Randomized, Double-Blind, Multi-Center Long Term Extension Study Investigating the Efficacy and Safety of PF-04965842 with or without Topical Medications, Administered to Subjects, Aged 12 Years and Older, with Moderate to Severe Atopic Dermatitis" Protocol B7451015; 2018-2024.

359. Sienna: "An Exploratory, Randomized, Double-Blind, Placebo-Controlled, Multicenter, Phase 2 Study to Evaluate the Safety, Tolerability, and Efficacy of SNA-120 (Pegcantratinib) Ointment for the Symptomatic Treatment of Persistent Pruritus and Psoriasis in Subjects Being Treated with Calcipotriene Ointment" Protocol SNA-120-202; 2018-2019.

360. UCB Biopharma: "A Phase 3, Multicenter, Randomized, Double-Blind Study with an Active-Controlled Initial Treatment Period Followed by a Dose-Blind Maintenance Treatment Period to Evaluate the Efficacy and Safety of Bimekizumab in Adult Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol PS0008; 2018-2020.

361. UCB Biopharma: "A Phase 3, Multicenter, Randomized, Double-Blind, Placebo- and Active Comparator-Controlled, Parallel-Group Study to Evaluate the Efficacy and Safety of Bimekizumab in Adult Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol PS0009; 2018-2020.

362. UCB Biopharma: "A Multicenter, Open-Label Study to Assess the Long-Term Safety, Tolerability, and Efficacy of Bimekizumab in Adult Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol PS0014; 2018-2024.

363. UCB Biopharma: "A Multicenter, Randomized, Double-Blind, Secukinumab-Controlled, Parallel-Group Study to Evaluate the Efficacy and Safety of Bimekizumab in Adult Subjects with Moderate to Severe Chronic Plaque Psoriasis" Protocol PS0015; 2018-2023.

364. UPENN: "A Phase IV, Open Label Study of the Effects of Apremilast on Vascular Inflammation and Cardiometabolic Function in Psoriasis" Protocol VIP-A 826652; 2018-2020.

365. Valeant: "A Multicenter, Randomized, Double-Blind, Vehicle-Controlled, Study to Evaluate the Efficacy and Safety of IDP-124 Lotion for the Treatment of Moderate to Severe Atopic Dermatitis in Pediatric and Adult Subjects" Protocol V01-124A-302; 2018-2020.

366. AbbVie: "A Phase 2, Multicenter, Randomized, Placebo-Controlled, Double-Blind Study to Evaluate Risankizumab in Adult and Adolescent Subjects with Moderate to Severe Atopic Dermatitis" Protocol M16-813; 2019-2023.

367. AbbVie: "Phase 3; A Multicenter, Single-Arm, Open Label, Assessor-Blinded Study to Assess the Usability of the STUDY DRUG Formulation Self-Administered by Auto-Injector for the Treatment of Adult Patients with Moderate to Severe Plaque Psoriasis" Protocol M16-005; 2019-2020.

368. AbbVie: "A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Assess the Safety and Efficacy of Risankizumab Using a New Formulation for the Treatment of Adult Subjects with Moderate to Severe Plaque Psoriasis" Protocol M15-999; 2019-2020.

369. Aclaris: "A Phase 3 Open Label Safety Study of A-101 Topical Solution for the Treatment of Common Warts" Protocol A-101-WART-303; 2019-2020.

370. Boehringer Ingelheim: "Phase IIa Multicentre, Randomized, Double-Blind, Placebo Controlled, Study to Evaluate the Safety, Tolerability and Efficacy of Treatment with BI 655130 in Adult Patients with Moderate to Severe Atopic Dermatitis" Protocol BI 1368-0032; 2019-2020.

371. Boehringer Ingelheim: "Phase II Long-Term Extension Study to Assess the Safety, Tolerability, and Efficacy of BI 730357 in Patients with Moderate-to-Severe Plaque Psoriasis" BI 1407-0005; 2019-2021.

372. Bristol-Myers Squibb: "An Open-Label, Multi-Center Extension Study to Characterize the Long-Term Safety and Efficacy of BMS-986165 in Subjects with Moderate-to-Severe Plaque Psoriasis" Protocol BMS IM011075; 2019-Present.

373. Celgene: "A Phase III, Multicenter, Randomized, Placebo-Controlled, Double-Blind Study of the Efficacy and Safety of Apremilast (CC-10004) in Subjects with Mild to Moderate Plaque Psoriasis" Protocol CC-10004-PSOR-022; 2019-2020.

374. Dermavant: "A Phase 3 Efficacy and Safety Study of Tapinarof Cream 1% vs Vehicle for the Treatment of Adult Plaque Psoriasis" Protocol DMVT-505-3001; 2019-2020.

375. Dermavant: "A Long-Term, Open-Label, Extension Study to Evaluate the Safety and Efficacy of Tapinarof Cream, 1% for the Treatment of Plaque Psoriasis in Adults E140" Protocol DMVT-505-3003; 2019-2021.

376. Galapagos: "A Randomized, Double-Blind, Placebo-Controlled, Multicenter Phase 2 Study to evaluate the safety and tolerability of subcutaneous MOR106 administered concomitantly with topical corticosteroids for eight weeks, in adult subjects with moderate to severe atopic dermatitis" Protocol MOR106-CL-204; 2019-2021.

377. Galderma: "A Randomized, Double-Blind, Placebo-Controlled Study to Assess the Efficacy and Safety of Nemolizumab (CD14152) in Subjects with Moderate-to-Severe Atopic Dermatitis" Protocol RD.03.SPR.118169 (NEMO program); 2019-2023.

378. Jiangsu Hengrui Medicine Co., LTD: "A Multi-Center, Randomized, Double-blind, Placebo-controlled, Multi-Dose Escalation Study to Assess the Safety, Tolerability, Pharmacokinetics, and Efficacy of SHR-1314 with Expanded Dose Finding in Subjects with Moderate-to-severe Plaque Psoriasis" Protocol SHR-1314-A201; 2019-2020.

379. Kiniksa: "A Phase 2a/b, Randomized, Double-Blind, Placebo-Controlled Study to Investigate the Efficacy, Safety, Tolerability and Pharmacokinetics of KPL-716 in Reducing Pruritus in Subjects with Prurigo Nodularis" Protocol KPL-716-C201; 2019-2020.

380. Kiniksa: "A Phase 2 Randomized, Double-Blind, Placebo-Controlled Pilot Study to Investigate the Efficacy, Safety, and Tolerability of KPL-716 in Reducing Pruritus in Diseases Characterized by Chronic Pruritus. (Ages 18-75)" Protocol KPL-716-C202; 2019-2020.

381. Novan: "A Phase 3 Multi-Center, Randomized, Double-Blind, Vehicle-Controlled, Parallel Group Study Comparing the Efficacy and Safety of SB206 and Vehicle Gel Once Daily in the Treatment of Molluscum Contagiosum" Protocol NI-MC302; 2019-2020.

382. Pfizer: "Phase 2; The Primary Objective of the Study is to Provide Data on Efficacy, Safety, Tolerability and PK of Multiple Topical Formulation Concentrations of PF-06700841 Topical Cream in the Treatment of Mild-to-Moderate Atopic Dermatitis (AD)" Protocol B7931022; 2019-2020.

383. Pfizer: "A Phase 2B, Randomized, Double Blind, Vehicle-Controlled, Parallel-Group, Dose Ranging Study to Assess Efficacy, Safety, Tolerability and Pharmacokinetics of PF-06700841 Topical Cream Applied Once or Twice Daily for 12 Weeks in Participants with Mild to Moderate Chronic Plaque Psoriasis" Protocol B7931023; 2019-2021.

384. Pfizer: "A Phase 3, Randomized, Double-Blind, Placebo Controlled, Multi-Center, Study Investigating the Efficacy and Safety of PF-04965842 Co-Administered with Background Medicated Topical Therapy in Adolescent Participants 12 to 18 Years with Moderate-to-Severe Atopic Dermatitis" Protocol B7451036; 2019-2020

385. Sol Gel: "A Phase 3, Multi-Center, Double-Blind, Randomized, Vehicle-Controlled Study of S6G5T-3 in the Treatment of Acne Vulgaris" Protocol SGT-65-04; 2019-2020.

386. Sun Pharma: "A Multicenter, Randomized, Double-Blind, Placebo-Controlled Clinical Study to Assess the Efficacy and Safety of Tildrakizumab in the Treatment of Moderate to Severe Plaque

Psoriasis of the Scalp" Protocol TILD-18-20; 2019-2022.

387. Target Pharma: "A Longitudinal Observational Study of Patients Undergoing Therapy for Immune-Mediated Inflammatory Skin Conditions" Protocol TARGET-DERM; 2019-2023.

388. AbbVie: A Phase 2, Multicenter, Randomized, Placebo-Controlled, Double-Blind Study to Evaluate Upadacitinib in Adult Subjects with Moderate to Severe Hidradenitis Suppurativa" Protocol M20-040; 2020-2022.

389. AbbVie: "A Randomized, Double-Blind, Placebo-Controlled, Multiple-Dose Study to Evaluate the Pharmacokinetics, Safety and Tolerability of ABBV-157 in Healthy Volunteers and in Subjects with Chronic Plaque Psoriasis" Protocol M17-238; 2020-2021.

390. Corrona: "Corrona Atopic Dermatitis (AD) Registry: A Study of Post Approval Drug Safety and Effectiveness" Protocol AD-550; 2020-2024.

391. Eli Lilly: "Phase 1, Multicenter, Randomized, Placebo-Controlled, Triple-Blind, Single-Ascending Dose and Repeat-Dose Trial in Healthy Participants and Participants with Atopic Dermatitis" J1B-MC-FRCC (d); 2020-2021.

392. Galderma: "A Prospective, Multicenter, Long-Term Study to Assess the Safety and Efficacy of Nemolizumab (CD14152) in Subjects with Moderate-to-Severe Atopic Dermatitis" Protocol RD.06.SPR.118163; 2020-Present.

393. Galderma: "A Randomized, Double-Blind, Placebo-Controlled Study to Assess Immunization Responses in Adult and Adolescent Subjects with Moderate-to-Severe Atopic Dermatitis Treated with Nemolizumab" Protocol RD.06.SPR.118380; 2020-2024.

394. Novartis: "Proof of Concept trial in moderate-to-severe Inflammatory Acne patients, testing an oral drug (LYS006) vs placebo" Protocol CLYS006X2201; 2020-2022.

395. Novartis: "A Proof of Concept Study to Evaluate the Efficacy, Safety and Tolerability of Secukinumab 300mg over 32 Weeks in Adult Patients with Biopsy-Proven Forms of Lichen Planus Not Adequately Controlled with Topical Therapies -Prelude" Protocol CAIN457S12201; 2020-2022.

396. Pfizer: "Phase 3B; Injectable for Moderate to Severe Atopic Dermatitis" Protocol B7451050; 2020-2021.

397. Sun Pharma: "A Phase III, Randomized, Double-Blind, Placebo-Controlled Study to Demonstrate the Efficacy and Safety of Tildrakizumab in Anti-TNF Experienced Subjects with Active Psoriatic Arthritis I (INSPIRE 1)" TILD-19-07; 2020-2022.

398. Abbvie: "IMMprint: Risankizumab in Moderate to Severe Plaque Psoriasis Patients with Palmoplantar Involvement" Protocol M15-994; 2021-2023.

399. Abbvie: "A Phase 4 Multicenter, Randomized, Open-label, Efficacy Assessor-blinded-Study of Risankizumab Compared to Apremilast for the Treatment of Adult Subjects with Moderate Plaque Psoriasis who are Candidates for Systemic Therapy" Protocol M20-326; 2021-2023.

400. Almirall: "Patient-reported Outcomes for Sarecycline Effectiveness and Safety (PROSES)" Protocol M-24001-40; 2021-2022.

401. Amgen: "Multicenter, Randomized, Double-Blind Study Evaluating the Pharmacokinetics, Efficacy, Safety, and Immunogenicity of Multiple Switches Between Humira® (adalimumab [US]) and ABP 501 Compared with Continued Use of Adalimumab in Subjects with Moderate to Severe Plaque Psoriasis" Protocol 20200497; 2021-2023.

402. Dermavant: "A Phase 3 Efficacy and Safety Study of Tapinarof for the Treatment of Moderate to Severe Atopic Dermatitis in Children and Adults" Protocol DMVT-505-3102; 2021-2023.

403. Dynamed: "A Clinical Biospecimen Sample Procurement & Observational Protocol to Support Exploratory Biomarker Generation, Testing Discovery Therapeutic Compound(S), and for the Advancement of Drug Research and Medical Diagnoses of Diseases" Protocol DM-SMB-053-01; 2021-2022.

404. Galderma: "A Prospective, Multicenter, Long-Term Study to Assess the Safety and Efficacy of Nemolizumab (CD14152) in Subjects with Prurigo Nodularis" Protocol RD.06.SPR.202699; 2021-Present.

405. MediWound LTD: "Phase I/II; An Open-Label Study to Evaluate the Safety and Efficacy of EscharEx (EX-02) in the Treatment of Basal Cell Carcinoma" Protocol MW2020-11-26; 2021-2023.

406. Eli Lilly/Dermira: "A Long-term Study to Assess the Safety and Efficacy of Lebrikizumab in Patients with Moderate-to-Severe Atopic Dermatitis" Protocol DRM06-AD07 (J2T-DM-KGAA); 2021-2024.

407. Incyte: "A Phase 2, Randomized, Double-Blind, Placebo-Controlled, Dose-Ranging Study of the Efficacy and Safety of INCB054707 in Participants with Prurigo Nodularis" Protocol INCB54707-206; 2021-2024.

408. Pfizer: "Abrocitinib Expanded Access Protocol for the Treatment of Adolescents and Adults with Moderate to Severe Atopic Dermatitis" Protocol B7451064; 2021-2023.

409. Regeneron: "A Multicenter, Randomized, Double-Blind, Placebo Controlled, Parallel-Group Study to Evaluate the Efficacy and Safety of Dupilumab in Adult and Adolescent Patients with Moderate-to-Severe Atopic Hand and Foot Dermatitis" Protocol R668-AD-1924; 2021-2023.

410. Abbvie: "A Phase 2 Multicenter, Randomized, Double-Blind Placebo-Controlled Study to Evaluate the Safety and Efficacy of Lutikizumab (ABT-981) in Adult Subjects with Moderate to Severe Hidradenitis Suppurativa Who Have Failed Anti-TNF Therapy" Protocol M20-262; 2022-2024.

411. Abbvie: "Study to Evaluate the Safety and Efficacy of Cedirogant (ABBV-157) in Adult Subjects with Moderate to Severe Psoriasis" Protocol M18-816; 2022-2023.

412. Aclaris: "A Phase 2b, Multicenter, Randomized, Double-blind, Vehicle-controlled, Parallel-group Study to Determine the Safety, Tolerability, Pharmacokinetics, and Efficacy of ATI-1777 in Patients 12 to 65 Years Old with Moderate or Severe Atopic Dermatitis (AD)" Protocol ATI-1777-AD-202; 2022-2024.

413. Acrotech: "A Phase 3, Randomized, Double-Blind, Vehicle-Controlled, Multicenter Study to Assess the Efficacy and Safety of Difamilast Ointment 1% in Children, Adolescents, and Adults with Mild to Moderate Atopic Dermatitis" Protocol MEDI-MM36-301; 2022-2024.

414. Acrotech: "A Multicenter, Open-Label Study to Assess the Long-Term Safety of Difamilast Ointment 1% in the Treatment of Children, Adolescents and Adults with Mild to Moderate Atopic Dermatitis" Protocol MEDI-MM36-302; 2022-2024.

415. Amgen: "A Phase 3, Open-label, 52-week Study to Assess the Safety, Tolerability, and Efficacy of Rocatinlimab (AMG 451) in Adolescent Subjects Aged 12 to 17 years With Moderate-to-severe Atopic Dermatitis (AD) (ROCKET-Orbit)" Protocol 20210263; 2022-Present.

416. Argenx: "A Randomized, Double-Blinded, Placebo-controlled Trial to Investigate Efficacy, Safety, Tolerability of Efgartigimod PH20 SC in Adult Patients with Pemphigus (Vulgaris or Foliaceus)" Protocol ARGX-113-1904; 2022-2023.

417. Argenx: "An Open-Label, Multicenter, Follow-up Trial of ARGX-113-1904 to Evaluate the Safety, Tolerability, and Efficacy of Efgartigimod PH20 SC in Patients With Pemphigus (ADDRESS+)" Protocol ARGX-113-1905; 2022-2024.

418. Argenx: "Phase 2/3, Randomized, Double-Blinded, Placebo-Controlled, Parallel-Group Study to Investigate the Efficacy and Safety of Efgartigimod PH20 SC in Adult Participants with Bullous Pemphigoid" Protocol ARGX-113-2009; 2022-2024.

419. Aslan: "A Randomized, Double-Blind, Placebo-Controlled, Multicenter, Dose-Ranging Trial to Evaluate the Efficacy and Safety of ASLAN004 in Patients with Moderate- to-Severe Atopic Dermatitis" Protocol ASLAN004-003; 2022-2023.

420. Bristol Myers Squibb: "A Multi-center, Randomized, Double-blind, Placebo-controlled, Parallel Group, Phase 2 Study to Evaluate Clinical Efficacy and Safety of Deucravacitinib (BMS-986165) in Participants with Alopecia Areata" Protocol IM011-134; 2022-2024.

421. Cara Therapeutics: "A Two-Part, Multicenter, Randomized, Double-Blind Study to Evaluate the Efficacy and Safety of Oral Difelikefalin as Adjunct Therapy to a Topical Corticosteroid for Moderate-to-Severe Pruritus in Adult Subjects with Atopic Dermatitis" Protocol CR845-310501; 2022-2024.

422. Celldex: "A Randomized, Double-Blind, Placebo-Controlled, Phase 1 Single Dose Study to Assess the Safety, Pharmacokinetics, and Clinical Effect of CDX-0159 in Patients with Prurigo Nodularis" Protocol CDX-0159-04; 2022-2023.

423. Dermavant: "An Open-Label, Long-Term Extension Study to Evaluate the Safety and Efficacy of Tapinarof Cream 1% in Subjects with Atopic Dermatitis" Protocol DMVT-505-3103; 2022-2024.

424. Eli Lilly: "PSoSA (PSOriasis Special Areas) - a US-based, Single-Arm, Prospective, Multicenter, Observational Study of Nail and Scalp Psoriasis Improvement in Patients Treated with Ixekizumab" Protocol I1F-MC-B018; 2022-2024.

425. Evommune: "A Randomized, Vehicle-Controlled, Safety and Efficacy Study of EVO101 in Adult Subjects with Atopic Dermatitis" Protocol EVO101-AD001; 2022-2023.

426. GLYCOS Bio Food Sciences: "Assessment of the effects on the skin microbiome of amending an over-the-counter Eczema product with Activated Oil (AO)" Protocol GLYCOS-002-AD22; 2022-2024.

427. GSK: "A Phase 1/2 randomized, observer-blinded, multi-country study to evaluate safety and

immunogenicity of investigational adjuvanted human papillomavirus vaccine in females (16 to 26 years of age)" Protocol 213749 (HPV9-AS04-001); 2022-2023.

428. Janssen Research & Development, LLC: "A Phase 2a/2b, Multicenter, Randomized, Placebo and Active Comparator-Controlled, Double-Blind, Dose-Ranging Study to Evaluate the Safety and Efficacy of Bermekimab (JNJ-77474462) for the Treatment of Subjects with Moderate to Severe Hidradenitis Suppurativa" Protocol 77474462HDS2001; 2022.

429. Janssen Research & Development, LLC: "A Phase 3b, Multicenter, Randomized, Double-blind, Placebo-controlled Study Evaluating the Safety and Efficacy of Guselkumab for the Treatment of Participants with Skin of Color who have Moderate-to-Severe Plaque Psoriasis and/or Moderate-to-Severe Scalp Psoriasis" Protocol CNTO1959PSO3017; 2022-Present.

430. Janssen Research & Development, LLC: "A Phase 3b, Multicenter, Randomized, Double-blind, Placebo-controlled Study Evaluating the Safety and Efficacy of Guselkumab for the Treatment of Subjects with Skin of Color Who have Moderate-to-Severe Plaque Psoriasis and/or Moderate-to-Severe Scalp Psoriasis" Protocol CNTO1959PSO3018; 2022-Present.

431. Janssen Research & Development, LLC: "A Phase 2b Multicenter, Randomized, Placebo-controlled, Dose-ranging Study to Evaluate the Efficacy and Safety of JNJ-77242113 for the Treatment of Moderate-to-Severe Plaque Psoriasis" Protocol JNJ77242113PSO2001 (FRONTIER 1); 2022-2023.

432. Janssen Research & Development, LLC: "A Phase 2b Multicenter, Long-Term Extension, Dose-ranging Study to Evaluate the Efficacy and Safety of JNJ-77242113 for the Treatment of Moderate-to-Severe Plaque Psoriasis FRONTIER 2" Protocol JNJ77242113PSO2002 (FRONTIER 2); 2022-2023.

433. Leo Pharma: "An Open-Label, Single-Arm, Phase 3 Trial to Evaluate the Safe and Effective Use of An Autoinjector for Administration of Tralokinumab in Subjects with Moderate-to-Severe Atopic Dermatitis" Protocol LP0162-1338; 2022-2023.

434. Meiji: "A Multi-center, Randomized, Double-blind, Placebo-controlled, Parallel Group, Phase 2a Study to Assess the Efficacy and Safety of ME3183 Administered Orally in Subjects with Moderate to Severe Plaque Psoriasis" Protocol ME3183-3; 2022-2023.

435. Xencor: "Phase 1; A Randomized, Double-Blind, Placebo-Controlled, Multiple Ascending-Dose Study of the Safety, Tolerability, Pharmacodynamics, and Pharmacokinetics of XmAb®27564 in Patients with Plaque Psoriasis" Protocol XmAb27564-02; 2022-2024.

436. Abbvie: "A Phase 3b/4 Randomized, Open-label, Efficacy Assessor Blinded Study, Comparing the Safety and Assessor Blinded Efficacy of Upadacitinib to Dupilumab in Subjects with Moderate to Severe Atopic Dermatitis (Level-Up)" Protocol M23-696; 2023-Present.

437. Abbvie: "A Phase 3, Randomized, Placebo-Controlled, Double-Blind Study to Evaluate Efficacy and Safety of Upadacitinib in Adult and Adolescent Subjects with Moderate to Severe Hidradenitis Suppurativa Who Have Failed Anti-TNF Therapy" Protocol M23-698; 2023-Present.

438. AbbVie: "A Phase 4 Multicenter, Randomized, Double-Blind Study of Risankizumab for the Treatment of Adult Subjects with Moderate to Severe Genital Psoriasis or Moderate to Severe Scalp Psoriasis" Protocol M23-702; 2023-Present.

439. AbbVie: "A Phase 3 Randomized, Placebo-Controlled, Double-Blind Program to Evaluate Efficacy and Safety of Upadacitinib in Adult and Adolescent Subjects with Severe Alopecia Areata" Protocol M23-716; 2023-Present.

440. ASLAN Pharmaceuticals Pte Ltd: "A Parallel Group Treatment, Phase 2a, Double-blind, Two-arm Study to Investigate the Efficacy and Safety of Farudodstat Tablets Compared with its Placebo in Male or Female Alopecia Areata Participants Aged 18 Years and Older with 30% or Greater Scalp Hair Loss: Protocol ASLAN003-004; 2023-Present.

441. Bluefin Biomedicine, Inc.: "A Double-blind, Randomized, Placebo-Controlled, 3-Part Study Investigating Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of Single and Multiple Ascending Doses of BFB759 in Healthy Participants, Patients with Moderate-Severe Atopic Dermatitis, and Patients with Moderate-Severe Hidradenitis Suppurativa" Protocol CL-BFB759-001; 2023-Present.

442. Boehringer Ingelheim: "Randomized, Double Blind, Placebo-Controlled Phase IIb/Phase III Study to Evaluate the Efficacy and Safety of Spesolimab in Patients with Moderate to Severe Hidradenitis Suppurativa. Lunsayil 1" Protocol BI 1368-0098; 2023-Present.

443. Bristol-Myers Squibb: "A Phase 4, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of Deucravacitinib in Participants with Non-Pustular Palmoplantar and Genital Psoriasis" Protocol IM011-1112; 2023-Present.

444. Bristol Myers Squibb: "A Phase 3b/4, Multicenter, Randomized, Double-Blind Placebo-Controlled Study to Evaluate the Efficacy and Safety of Deucravacitinib in Participants with Moderate-to-Severe Scalp Psoriasis (Psoriatyk Scalp)" Protocol IM011-220; 2023-Present.

445. Dermavant: "Phase 4, open-label study to investigate the efficacy and safety of VTAMA® (Tapinarof) Cream, 1% in the Treatment of Plaque Psoriasis in Intertriginous Areas" Protocol DMVT-505-4001; 2023.

446. Incyte Corporation: "A Phase 3, Double-Blind, Randomized, Vehicle-Controlled, Efficacy and Safety Study of Ruxolitinib Cream in Participants With Prurigo Nodularis" Protocol INCB 18424-319; 2023-Present.

447. Janssen Research & Development, LLC: "A Phase 3 Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of JNJ-77242113 for the Treatment of Participants with Moderate to Severe Plaque Psoriasis with Randomized Withdrawal and Retreatment" Protocol 77242113PSO3001 (ICONIC LEAD); 2023-Present.

448. Janssen Research & Development, LLC: "A Phase 3 Multicenter, Randomized, Double-blind, Placebo-Controlled and Deucravacitinib Active Comparator-Controlled Study to Evaluate the Efficacy and Safety of JNJ-77242113 for the Treatment of Participants with Moderate to Severe Plaque Psoriasis" Protocol 77242113PSO3002 (ICONIC ADVANCE 1); 2023-Present.

449. Janssen Research & Development, LLC: "A Phase 3 Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of JNJ-77242113 for the Treatment of Participants with Plaque Psoriasis Involving Special Areas" Protocol 77242113PSO3003 (ICONIC TOTAL); 2023-Present.

450. Pfizer: "A Phase 3 Randomized, Double-Blind, 52-Week Placebo Controlled Multi-Center Study with a Double-Blind 52-Week Extension Period with Randomized Dose Up/Dose Down Titration Investigating the Efficacy, Safety, and Tolerability of Ritlecitinib in Adult Participants with

Nonsegmental Vitiligo" Protocol B7981080; 2023-Present.

451. Regeneron: "An Open-Label Single-Arm Study of Dupilumab in Adolescent and Adult Skin of Color Patients with Moderate-to-Severe Atopic Dermatitis" Protocol R668-AD-2217; 2023-Present.

452. Sanofi US Services Inc.: "A Randomized, Double-Blind, Placebo-Controlled, Proof-of-Concept Study Assessing the Efficacy and Safety of an Anti-TNF-OX40L NANOBODY® Molecule, SAR442970, in Participants with Moderate to Severe Hidradenitis Suppurativa" Protocol ACT16852; 2023-Present.

453. Sanofi US Services Inc.: "A Phase 2, International, Multicenter, Randomized, Double-blind, Placebo-controlled, Dose-ranging Study of Efficacy and Safety of SAR441566 in Adult with Moderate to Severe Plaque Psoriasis" Protocol DRI17849; 2023-Present.

454. Vyne Therapeutics Inc.: "Phase 1, Single and Multiple Ascending Dose (SAD/MAD) Study of the Safety, Tolerability, Pharmacokinetics, Pharmacodynamics, and Preliminary Efficacy of VYN201 in Healthy Volunteers and in Subjects with Non-Segmental Vitiligo" Protocol VY2022-01; 2023-2024.

455. Abbvie: "A Phase 3 Multicenter, Randomized, Double-Blind Placebo-Controlled Study to Evaluate the Efficacy and Safety of Lutikizumab in Adult and Adolescent Subjects with Moderate to Severe Hidradenitis Suppurativa" Protocol M20-465; 2024-Present.

456. Apollo Therapeutics: "A Phase 2a, Multicenter, Randomized, Double-Blind, 16-week Placebo-Controlled Study with an Open-Label Extension to Evaluate the Efficacy and Safety of Camoteskimab in Adults with Moderate to Severe Atopic Dermatitis" Protocol AP43CP03; 2024-Present.

457. Celldex therapeutics, Inc.: "A Phase 2, Randomized, Double-Blind, Placebo-Controlled Study to Assess the Efficacy and Safety of Barzolvolimab in Patients with Prurigo Nodularis" Protocol CDX0159-10; 2024-Present.

458. Clexio Biosciences LTD: "A Randomized, Double-blind, Vehicle-controlled, Multicenter, Parallel-Design, Phase 2 Study to Assess the Efficacy and Safety of CLE-400 Topical Gel for the Treatment of Chronic Pruritus in Adult Subjects with Notalgia Paresthetica" Protocol CLE400-NP-201; 2024-Present.

459. Eli Lilly: "Phase 2. Randomized, Double-Blind, Placebo-Controlled Study to Investigate the Efficacy and Safety of LY3972406 in Adults with Moderate-to-Severe Plaque Psoriasis" Protocol J4H-MC-FVAA; 2024-Present.

460. Incyte Corporation: "A Phase 3b, Double-Blind, Multicenter, Randomized, Vehicle-Controlled, Efficacy and Safety Study of Ruxolitinib Cream in Adults With Moderate Atopic Dermatitis. (TRuE-AD4)" Protocol INCB18424-326; 2024-Present.

461. Incyte Corporation: "A Phase 3, Randomized, Double-Blind, 52-Week, Placebo-Controlled, Efficacy and Safety Study of Povorcitinib in Participants With Nonsegmental Vitiligo" Protocol INCB 54707-303; 2024-Present.

462. Leo Pharma: "A phase 3b, interventional, adaptive, clinical trial to evaluate the efficacy and safety of tralokinumab 300 mg every second week monotherapy compared with placebo in subjects with moderate-to-severe atopic hand eczema who are candidates for systemic therapy (ADHAND)" Protocol LP0162-2328; 2024-Present..

463. Sanofi US Services Inc.: "A Phase 2, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Proof-of-Concept Study Assessing the Efficacy and Safety of Amlitelimab in Adult Participants with Moderate to Severe Hidradenitis Suppurativa" Protocol ACT17967 (COAST); 2024-Present.

464. Sanofi US Services Inc.: "A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, 3-Arm, Multinational, Multicenter Study to Evaluate the Efficacy and Safety of Amlitelimab Monotherapy by Subcutaneous Injection in Participants Aged 12 Years and Older with Moderate-to-Severe Atopic Dermatitis" Protocol EFC17560 (COAST 2); 2024-Present.

465. Sanofi US Services Inc.: "A Phase I/II, Randomized, Placebo-Controlled, Multi-Arm, Dose Finding Study to Evaluate the Safety, Efficacy and Immunogenicity of an Acne mRNA Vaccine Candidate in Adults with Moderate to Severe Acne 18 to 45 Years of Age" Protocol VBE00001; 2024-Present.

VACCINE DEVELOPMENT AND TESTING

466. Chiron Corp.: "A Phase III, Randomized, Double-Blind, Placebo-Controlled, Multi-Center Study of the Efficacy of an HSV Vaccine Composed of Recombinant Herpes Simplex Virus Type 2 (HSV-2) Subunit Antigens Combined with MF 59 Adjuvant Emulsion when Given to HSV-2 Seronegative Monogamous Sex Partners of Persons with Genital Herpes Type 2" Protocol V5P16; 1994-1996.

467. Chiron Corp.: "A Phase III, Double Blind, Randomized, Parallel Design, Multi Center, Lot-to-Lot Consistency Study of the Safety, Tolerability, and Immunogenicity of an HSV Vaccine Composed of Recombinant Herpes Simplex Virus Type 2 (HSV-2) Subunit Antigens Combined with MF59 Adjuvant Emulsion When Given to Healthy HSV-2 Seronegative Adults" Protocol V5P17; 1995-1996.

468. Chiron Corp.: "A Phase III, Double Blind, Randomized, Placebo-Controlled, Parallel Multi Center Study of the Efficacy of a Fourth Immunization with an HSV Vaccine Composed of Combined Recombinant Herpes Simplex Virus Type 2 Subunit Antigens Combined with MF59 Adjuvant Emulsion when given to Previously Immunized Subjects in Protocol V5P16" Protocol V5P12; 1995-1997.

469. Chiron Corp.: "A Phase III, Randomized, Double-Blind, Placebo-Controlled, Multi Center Study of the Efficacy of an HSV Vaccine Composed of Recombinant Herpes Simplex Virus Type 2 (HSV-2) Subunit Antigens Combined with MF 59 Adjuvant Emulsion When Given to HSV-2 Seronegative Adults at High Risk for Acquisition of Sexually Transmitted Diseases" Protocol V5P15; 1994-1996.

470. SmithKline Beecham Biologicals: "A Double-Blind, Randomized, Placebo-Controlled Study to Evaluate the Efficacy of SmithKline Beecham Biologicals' Herpes Simplex Candidate Vaccine (gD2t) with MPL to Prevent Genital Herpes Disease in Healthy Consorts of Subjects with Genital Herpes Disease" Protocol 007; 1994-1998.

471. SmithKline Beecham Biologicals: "A Double-Blind, Randomized, Placebo-Controlled, Study to Evaluate the Safety of SmithKline Beecham Biologicals' Herpes Simplex Candidate Vaccine (gD2t) with MPL and its Efficacy to Prevent Genital Herpes Disease in HSV Positive or Negative Consorts of Subjects with Genital Herpes Disease" Protocol 017; 1995-1998.

472. SmithKline Beecham Biologicals: "A Double-Blind, Randomized, Placebo-Controlled, Study to Evaluate the Safety of SmithKline Beecham Biologicals' Herpes Simplex Candidate Vaccine (gD2t) with MPL in HSV Seropositive or Seronegative Subjects Without Genital Herpes Disease" Protocol 016; 1995-1997.

473. VaxGen, Inc.: "A Phase III Trial to Determine the Efficacy of Bivalent AIDSVAX B/B Vaccine in Adults at Risk of Sexually Transmitted HIV-I Infection in North America" 1998-2003.

474. Merck & Company, Inc.: "Multicenter, Randomized, Double-Blind Study to Evaluate the Safety, Tolerability, and Immunogenicity of a 2-dose Regimen of High Titered Process Upgrade Varicella Vaccine (PUVV) in subjects ≥13 Years of Age" 1999-2001.

475. Glaxo Wellcome, Inc.: "A Phase II, Randomized, Double-Blind, Placebo-Controlled Study to Assess the Efficacy and Safety of TA-HSV(GW419458X) Vaccine for the Treatment of Recurrent Herpes Genitalis" 1999-2001.

476. Med Immune: "A Phase II Double-Blind, Randomized, Dose-Comparison Study to Evaluate the Safety and Immunogenicity of MEDI-517, a Virus-Like Particle Vaccine Against Human Papillomavirus Types 16 and 18, in Healthy Adult Female Volunteers" Protocol MI-CP057; 1999-2001.

477. Med Immune: "A Phase I Study to Evaluate the Safety and Immunogenicity of MEDI-517, a Virus-like Particle Vaccine against Human Papillomavirus (HPV) Types 16 and 18, in Healthy Adult Female Volunteers who are HPV-16 or HPV-18 DNA Positive" Protocol MI-CP058; 1999-2001.

478. SmithKline Beecham Biologicals: "A Multicenter, Epidemiology Study to Evaluate the Prevalence of Human Papillomavirus (HPV) Infections in Adolescent and Adult Females in North America and Brazil" Protocol HPV-106; 2000-2001.

479. SmithKline Beecham Biologicals: "A Double-Blind Placebo-controlled, Randomised, Pilot Phase IIB Study of the Efficacy of an HPV-16/18 VLP vaccine in the Prevention of HPV-16 and/or HPV-18 Cervical Infection in Healthy Adolescent and Young Adult Women in North America and Brazil" Protocol HPV-001; 2001-2004.

480. Merck & Co., Inc: "A Double-Blind Placebo Controlled, Randomized Study to Evaluate Safety, Tolerability and Immunogenicity After One and Two Doses of PHN/Zoster Vaccine, Protocol 007-00" 2001-2005.

481. GlaxoSmithKline Biologicals': "Open Study to Further Evaluate the Safety, Reactogenicity, and Immunogenicity of GlaxoSmithKline Biologicals' Prophylactic Herpes Simplex Candidate Vaccine with gD-alum-MPL in HSV-1 and HSV-2 Seronegative (HSV 1-/2-) Women Who Previously Received Either, Alum-MPL or Alum as Placebo During One of GlaxoSmithKline Biologicals' Phase III Studies 208141/005 (HSV-007), 208141/016 (HSV-016) or 208141/017 (HSV-017), Protocol 038" 2002-2004.

482. GlaxoSmithKline: "A Phase IIb, Blinded, Multi-Center, Long-Term Follow-Up Study of the Efficacy of Candidate HPV-16/18 VLP Vaccine in the Prevention of HPV-16 and/or HPV-18 Cervical Infection in Adolescent and Young Adult Women in North America and Brazil Vaccinated in Primary Study 580299/001" Protocol 58099/007; 2003-2004.

483. Merck: "A Multicenter, Double-Blind, Randomized, Placebo-Controlled Probe Study with an Additional Open-Label Control Arm to Evaluate the Safety and Immunogenicity of a 3-dose Regimen of the MRKAd5 HIV-1 Gag Vaccine in Subjects with Chronic Hepatitis C Virus Infection" Protocol 022; 2004-2005.

484. PowderJect Vaccines Inc: "A Phase I, Single-Center, Open-Label, Dose-Escalating Study to Investigate the Safety, Tolerability and Immunogenicity of PPJV7630, a therapeutic DNA Vaccine for Herpes Simplex Virus Type 2 (HSV-2) in Subjects with Recurrent Genital Herpes Caused by HSV-2" Protocol PJ HSV-001; 2004-2006.

485. GlaxoSmithKline: "A Phase III, Double-Blind, Randomized, Controlled, Multi-Center Study to Evaluate the Efficacy of GlaxoSmithKline Biologicals' HPV-16/18 VLP/AS04 Vaccine Compared to Hepatitis A Vaccine as Control in Prevention of Persistent HPV-16 or HPV-18 Cervical Infection and Cervical Neoplasia, Administered Intramuscularly According to a 0, 1, 6 Month Schedule in Healthy Females 15-25 Years of Age" Protocol 58099/008; 2004-2006.

486. Merck: "A Multicenter, Double-Blind, Randomized, Placebo-Controlled Phase II Proof-Of-Concept Study to Evaluate the Safety and Efficacy of a 3-Dose Regimen of the Merck Adenovirus Serotype 5 HIV-1 Gag/Pol/Nef Vaccine (MRKAd5 HIV-1 Gag/Pol/Nef) in Adults at High Risk of HIV-1 Infection" Protocol V520/023-01; 2004-2009.

487. Merck: "A Phase III Clinical Trial To Study the Safety, Tolerability and Immunogenicity of Zoster Vaccine Live (Oka/Merck) in Subjects with a History of Herpes Zoster" Protocol V211/014-00; 2006-2008.

488. Merck & Co., Inc: "A Phase IV Clinical Trial to Evaluate the Safety and Tolerability of ZOSTAVAX™ in Subjects ≥ 60 Years of Age" Protocol V211-020-00; 2007-2009.

489. Merck & Co., Inc.: "A Phase III Clinical Trial to Evaluate the Efficacy, Immunogenicity, Safety and Tolerability of ZOSTAVAX in Subjects 50 to 59 Years of Age" Protocol V211-022; 2007-2009.

490. Merck & Co., Inc.: "A Double-blind, Randomized, Placebo-Controlled, Parallel Group Study to Evaluate Biomarkers of Immunity to Varicella Zoster Virus Following Immunization with V212/Heat-Treated Varicella-Zoster Virus (VAV) Vaccine or with ZOSTAVAX™ in Healthy Volunteers" Protocol V212-003; 2009-2011.

491. GlaxoSmithKline: "Safety Study of GSK Biologicals' Human Papillomavirus Vaccine (GSK580299) in Female American and Canadian Subjects who had Received Control Vaccine in Study 580299/008" Protocol HPV 111955/057); 2009-2010.

492. Merck: "A Double-Blind, Randomized, Placebo-Controlled, Parallel Group Study to Evaluate Biomarkers of Immunity to Varicella Zoster Virus Following Immunization with V212/Heat Treated Varicella-Zoster Virus (VZV) Vaccine or with Zostavax in Health Volunteers" Protocol V212-003; 2009-2010.

493. Merck: "An Observational Follow-up of Adult Participants Enrolled in the Step Study (Merck V520 Protocol 023/HVTN 502), A 3-dose Regimen of the Merck MRK Ad5 HIV-1 gag/pol/nef Vaccine or Placebo" Protocol V520-030/HVTN 504; 2009-2010.

## PUBLICATIONS IN JOURNALS, CHAPTERS, MONOGRAPHS AND BOOKS

### ARTICLES IN PEER-REVIEWED JOURNALS (BASIC, BASIC & CLINICAL, CLINICAL)

### A. BASIC RESEARCH

1. **Tyring, S.K.**, F. Churchill, and W. Stevens. A seasonal bacterial survey of the honey mesquite (*Prosopis glandulosa var. glandulosa Torr.*). *Sci. Biol.* J. 4:39-49; 1978.

2. **Tyring, S.K.**, K. Klager, A. Luk, F. Messiha, and S. Lefkowitz. Ethanol, disulfiram and pyrazole: effects on interferon production in mice. *Immunopharm.* 2:63-72; 1979.

3. **Tyring, S.K.**, and S. Lefkowitz. Strain differences in production of murine interferons. *P.S.E.B.M.* 164:519-523; 1980.

4. **Tyring, S.K.**, and S. Lefkowitz. Induction of interferon by levamisole and concanavalin A in HA/ICR and NZB/W mouse spleen cells. *Experientia* 36:1323-1324; 1980.

5. Nemeth, D., **S.K. Tyring**, and S. Lefkowitz. Hematological and immunological effects of methadone administration in mice. *Res. Comm. In Substance Abuse* 1:177-183; 1980.

6. **Tyring, S.K.**, A. Luk, and S. Lefkowitz. Antiviral action of murine interferons on heterologous cells. *Intervirology* 15:223-227; 1981.

7. **Tyring, S.K.**, G. Klimpel, W. Fleischmann, and S. Baron. Direct cytolysis by partially-purified preparations of immune interferon. *Int. J. Cancer* 30:59-64; 1982.

8. **Tyring, S.K.**, A. Luk, and S. Lefkowitz. Priming of L cells by murine immune interferon. *Intervirology* 19:144-148; 1983.

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## ABSTRACTS

More than 1000 published abstracts.

## PRESENTATIONS

More than 1000 national and international presentations by Dr. Tyring and by research faculty, postdoctoral fellows, graduate and medical students who worked in Dr. Tyring's laboratory and/or research clinics.