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PROFESSIONAL WORK HISTORY:

10/1993 – Present Ironwood Cancer & Research Centers, Medical Oncologist

EDUCATION:

1970 - 1975	St. George's College, Mussoorie, India Affiliated to Cambridge University, London
1976 - 1977	D.A.V. College, Chandigarh, India
1977 - 1982	Christian Medical College, Ludhiana, India
TRAINING	
01/82 - 12/82	Rotating Internship; Christian Medical College, Ludhiana, India
01/83 - 06/83	PGY-I Anesthesia; Christian Medical College, Ludhiana, India
06/83 - 09/83	PGY-1 Psychiatry; Christian Medical College, Ludhiana, India
07/85 - 06/86	PGY-I General Surgery; Detroit Macomb Hospital Corp., Detroit, MI
07/86 - 06/87	PGY-2 General Surgery; Detroit Macomb Hospital Corp., Detroit, MI
07/87 - 06/90	Resident, Internal Medicine; Bon Secours Hospital, Grosse Pointe, MI
07/90 - 06/93	Fellow, Division of Hematology and Oncology; Wayne State University School of Medicine, Detroit, MI
07/92 - 06/93	Chief Fellow, Division of Hematology and Oncology; Wayne State University School of Medicine, Detroit, MI

CERTIFICATIONS

Diplomat, The American Board of Internal Medicine, 1990 Diplomat, Subspecialty Board of Medical Oncology, 1993 Diplomat, Subspecialty Board of Medical Hematology, 1994

EDUCATIONAL ACTIVITIES

Chief Fellow, Wayne State University, Detroit, MI

BOARD COMMITTEE ACTIVITIES

Arizona Care Network, Steering Committee 2011-2012.
Arizona Care Network, Board Member 2012-2014.
Dignity Cancer committee 2011-ongoing.
Director at large The Arizona Clinical Oncology Society 2014.
Deans Council ASU Law School 2011-2014.
Scientific Board ASU Law School 2011-2014.
Advisory Board Sikh coalition, a non-profit organization 2011-2015.
5 Rivers Foundation, a Non Profit org, board member 2012-onwards.

HONORS AND AWARDS

Holden Award (for paper presentation), June 1988, Bon Secours Hospital, Grosse Pointe, MI Semmes Award (for excellent patient care), June 1989, Bon Secours Hospital, Grosse Pointe, MI

PROFESSIONAL SOCIETIES

American College of Physicians, Member

American Society of Clinical Oncology

PRESENTATIONS AT LOCAL MEETINGS

- I. Advances in Breast Cancer, Chandler Regional Hospital Auditorium, Chandler, May 1994
- 2. Breast Cancer, Chandler Regional Hospital, Chandler, April 1995
- 3. Breast Cancer, Ahwautukee, Phoenix, April 1995

PRESENTATIONS AT REGIONAL MEETINGS

- I. Khanuja, P.S.; Amaria, Y.N.; Jareunpoon O.J. Critical Appraisal of Subclavian and Internal Jugular Catheterization, Detroit Macomb Hospital Corporation, May, 1986.
- 2. Hineman, P.J.; Khanuja, P.S.; O'Neill, A. Three Histiologically Distinct Neoplasms in One Lung, Michigan Chapter ACP Regional Meeting, September, 1988.
- 3. Khanuja, P.S.; Punia, S.S.; Hans, S.S. Role of Carotid Endarterectomy after Completed Stroke, Michigan Chapter ACP Regional Meeting, September 1988.
- 4. Khanuja, P.S.; Tcledo-Pereyra, L.H.; Talor, D. Diagnostic Value of Indium-III Leukocyte Scans for Localizing Infective Foci in Febrile Renal or Combined Renal and Pancreatic Transplant Patients, Michigan Chapter ACP Regional Meeting, September, 1988.
- 5. Khanuja, P.S.; Cushing, R.D.; Hoerler, S.D. Candida Albicans and Staphylococcus Aureus Renal Papillary Necrosis in an Immunocompromised Patient, Michigan Chapter ACP Regional Meeting, September, 1988.
- 6. Khanuja, P.S.; Narasimhan, L.; Ghanem, C.; Bradfield, R.J. Peripartum Cardiomyopathy in a White Primiparous Patient. Michigan Chapter ACP Regional Meeting, September, 1988.

- 7. Khanuja, P.S.; Gehani, S.; Autonacopoulos, P. Rare Entity of Adenocarcinoma Arising in Goblet Cell Carcinoid. Michigan Chapter ACP Regional Meeting, September 1989.
- 8. Khangura, S.S.; Khanuja, P.S.; O'Neill, A. Endometriosis of Appendix Presenting as Acute Appendicitis. Michigan Chapter ACP Regional Meeting, October 1990.
- 9. Khanuja, P.S. Late Sequelae of Cancers. Oncology Grand Rounds, Wayne State University, 1991.

PRESENTATIONS AT REGIONAL MEETINGS (CONT)

 Fregene, T.A.; Khanuja, P.S.; Gimotty, P.; Kellogg, C.; George, J., Pienta, K.J. Angiogenesis; Prognosis for Early Breast Cancer? 4th Annual Cancer Research Conference, Michigan Cancer Foundation, Ann Arbor, MI, September, 1993.

PRESENTATIONS AT NATIONAL MEETINGS

- I. Khanuja, P.S.; Pienta, K.J. Nuclear Matrix Proteins in Normal and Breast Cancer Cells. AACR, Orlando, FL, May, 1993.
- 2. Khanuja, P.S.; Fregene, T.; Gimotty, P.; George, J.; Pienta, K.J. Angiogenesis Does Not Predict Recurrence in Patients with Primary Breast Cancer. ASCO, Orlando, FL, May, 1993.
- 2.3. Khanuja, P.S.; Poplin, E.; Kraut, M.; Herskovic, A.; Kinzie, J.; Steiger, Z.; Vaitkevicius, V.K. Chemoradiotherapy of Esophageal Carcinoma. ASCO, Orlando, FL, May, 1993.
- 3.4. Fregene, T.A.; Kellogg, C.M.; Gimotty, P., Khanuja, P.S.; Pienta, K.J. Angiogeneis in Breast Cancer: Comparison of Microvessel Distribution in T1 and T2 Tumors. 16th Annual San Antonio Breast Cancer Symposium, San Antonio, TX, November, 1993.
- 4.<u>5.</u> Fregene, T.A.,; Khanuja, P.S.; George, J.; Kellogg, C.; Gimotty, P.; Pienta, K.J. Nuclear Morphometry Predicts for Disease Recurrence in Early Stage Breast Cancer. AACR, April, 1994.

PRESENTATIONS AT INTERNATIONAL MEETINGS

- Khanuja, P.S.; Bandlein, K.O.; Toledo-Pereyra, L.H.; Whitten, J.I.; Gordon, D.A. Contribution of T Cell Subset Monitoring of Renal Transplant Recipients in the Cyclosporine Era, XII International Congress of the Transplantation Society, Sydney, Australia, August, 1988.
- 2. Khanuja, P.S.; Reading, B.; Kish, J.A.; Ensley, J.F.; Al-Sarraf, N. Achievement of Complete Response to Systemic Chemotherapy in Patients with Metastatic and Recurrent Head and Neck Cancers which Resulted in Prolonged Disease-Free Survival and Possible Cure. Third International Conference on Head and Neck Cancer, San Francisco, CA, July, 1992
- 3. Khanuja, P.S.; Gimotty, P.; Fregene, T.; George, J.; Pienta, K.J. Angiogeneisis Quantitation as a Prognostic Factor for Primary Breast Carcinoma 2 cms or Less. 7th International Conference on time Adjuvant Therapy of Cancer, Tucson, AZ, March, 1993.

PUBLICATIONS

Original Observations in Referred Journals/Books

- 1. Mittal, V.; Khanuja, P.S.; Amaria, Y.N.; Hans, S.S. Angiodysplasia in Transposed Colon. Arch. Surg. 123:1019-1020, 1988.
- Khanuja, P.S.; Bandlein, K.O.; Toledo-Pereyra, L.H.; Whitten, J.I.; Gordon, D.A. Contribution of T Cell Subset Monitoring of Renal Transplant Recipients in the Cyclosporine Era. Transplant Proc. 21:1852-1853, 1989.
- 3. Khanuja, P.S.; Lehr, J.E.; Soule, M.D.; Gehani, S.K.; Noto, A.C., Choudhury, S.; Chen, R., Pienta, K.J. Nuclear Matrix Proteins in Normal and Breast Cancer Cells. Cancer Research, 53:3394-3398, 1993.
- Khanuja, P.S.; Gimotty, P.; Fregene, T.; George, J.; Pienta, K.J. Angiogenesis Quantitation as a Prognostic Factor for Primary Breast Carcinoma 2 cms or Less. Salmon: Adjuvant Therapy of Cancer VII, 226-232, 1993.
- 5. Fregene, T.A.; Khanuja, P.S.; Noto, A.C.; Gehani, S.K.; Vqnegmont, ELM.; Pienta, K.J. Tumor-Associated Angiogenesis in Prostate Cancer. Anticancer Research, 13:2377-2382, 1993.
- 6. Smith, M.R.; Khanuja, P.S.; Al-Katib, A.; Bishop, C.R.; Andersen, J.; Hussein, M.; Karanes, C. ABDIC for Cytoreduction Prior to BMT for Relapsed/Refractory Hodgkin's Disease. Cancer, 73:1264"1269, 1994.
- 6.7. Poplin, E.; Khanuja, P.S.; Kraut, N.; Herskovic, A.; Kinzie, J.; Steiger, Z. Vaitkevicius, V.K. Chemoradiotherapy of Esophageal Carcinoma. Cancer, 74:1217-1224, 1994.
- 7.8. Fregene, T.A.; Khanuja, P.S.; Gimotty, P.; Kellogg, C.; George, J.; Pienta, K.J. The Relationship of Microvessel Counts to Tumor Size, Estrogen Receptor Status, Lymph Node Metastasis, and Disease-Free Survival in Patients with Stage I and II Breast Cancer. In Press, Anticancer Research, 1995.

ABSTRACTS

- 1. Khanuja, P.S.; Karanes, C.; Al-Katib, A.; Smith, M.R. Continuous Infusion of ABDIC as Salvage Chemotherapy for Refractory/Relapsed Hodgkin's Disease. Proc. ASCO, 10:282, 1991 (Abstract #984).
- Khanuja, P.S.; Fish, J.A.; Ensley, J.F.; Tilchen, E.; Reading, B.; Al-Sarraf, M. The Significance and Improved Disease-Free Survival Who Achieved Complete Response to Effective Chemotherapy. Proc. ASCO, 10:205, 1991 (Abstract #683).
- 3. Khanuja, P.S.; Reading, B.; Kish, J.A.; Ensley, J.F.; Al-Sarraf, M. Achievement of Complete Response to Systemic Chemotherapy in Patients with Metastatic and Recurrent Head and Neck Cancers which Resulted in Prolonged Disease-Free Survival and Possible Cure. Third International Conference on Head and Neck Cancer, San Francisco, CA, July, 1992. (Abstract #121).
- Khanuja, P.S.; Smith, M.R.; Al-Katib, A.; Bishop, C.R.; Hussein, N. Continuous Infusion (CI) ABDIC for Cytoreduction Prior to BMT for Relapsed/Refractory Hodgkin's Disease (HD). Blood, 80 (Suppl. 1):469a, 1992.
- 5. Khanuja, P.S.; Fienta, K.J. Nuclear Matrix Proteins in Normal and Breast Cancer Cells. Proc. AACR,34:30, 1993. (Abstract #173).
- 6. Khanuja, P.S.; Fregene, T.; Gimotty, P.; George, J.; Pienta, K.J. Angiogenesis Does Not Predict Recurrence in Patients with Primary Breast Cancer. Proc. ASCO, 12:66, 1993.

- 7. Khanuja, P.S.; Poplin, B.; Kraut, N.; Herskovic, A.; Kinzie, J.; Steiger, 2.; Vaitkevicius, V.K. Chemoradiotherapy of Esophageal Carcinoma. Proc. ASCO, 12:198, 1993.
- 8. Fregene, T.A.; Khanuja, P.S.; George J.; Kellogg, C.; Gimotty, P.; Pienta, K.J. Nuclear Morphometry Predicts for Disease Recurrence in Early Stage Breast Cancer. Proc. AACR, 1994 (Abstract #1354).

RESEARCH PROTOCOLS: SUB-INVESTIGATOR RESPONSIBILITIES

<u>Amgen Protocol 20060136</u>: A Phase 2, Multicenter, Open Label, Randomized Trial of AMG 706 or Bevacizumab in Combination With Paclitaxel and Carboplatin for Advanced Non-Squamous Non-Small Cell Lung Cancer. (2007-)

<u>Astra Zeneca Protocol D4200C00036</u>: A Phase III, Randomized, Double-Blinded, Parallel Group, Multi-Centre Study to Assess the Efficacy and Safety of ZD6474 (ZACTIMA[™]) in Combination with Pemetrexed (Alimta®) versus Pemetrexed alone in Patients With Locally Advanced or Metastatic (Stage IIIB-IV) Non-Small Cell Lung Cancer (NSCLC) after Failure of Ist Line Anti-Cancer Therapy. (2007 – 2008)

<u>Amgen Protocol 20060362</u>: An International, Randomized, Double-blind, Placebo-controlled, Phase 2 Study of AMG 479 with Exemestane or Fulvestrant in Postmenopausal Women with Hormone Receptor Positive Locally Advanced or Metastatic Breast Cancer (2008 -)

<u>Pfizer Protocol A6181104</u>: A Randomized, Phase 2B Study of Sunitinib Plus Oxaliplatin, 5-Fluorouracil and Leucovorin (FOLFOX) Versus Bevacizumab Plus FOLFOX as First-Line Treatment In Patients with Metastatic Colorectal Cancer (2008 -)

Sanofi-Aventis Protocol: A Multicenter, Randomized, Double-Blind Placebo Controlled Phase III Study of the Efficacy of Xaliproden in Preventing the Neurotoxicity of Oxaliplatin in First-Line Treatment of Patients with Metastatic Colorectal Cancer Treated with Oxaliplatin/5-FU/LV (2007 – 2008)

Novacea Protocol 011-007: A Phase 3, Randomized, Open-Label Study Evaluating DN-101 in Combination with Docetaxel in Androgen-Independent Prostate Cancer (AIPC) (ASCENT-2) (2007)

<u>Abbott Protocol M10-301</u>: A Phase 2 Randomized, Placebo-Controlled, Double-Blind Study of Carboplatin/Paclitaxel in Combination with ABT-869 Versus Carboplatin/Paclitaxel Alone in Subjects with Advanced or Metastatic Non-Small Cell Lung Cancer (NSCLC) as First-Line Treatment (2009-)

<u>Genentech Protocol TDM4370g/Roche Protocol BO21977</u>: A Randomized, Multicenter, Phase III Open-Label Study of the Efficacy and Safety of Trastuzumab-MCC-DM1 vs Capecitabine + Lapatinib in Patients with HER2-Positive Locally Advanced or Metastatic Breast Cancer Who Have Received Prior Trastuzumab-Based Therapy (EMILIA) (2009-)

Novartis Protocol CRAD001Y2301: A Randomized Double-Blind, Placebo-Controlled Study of Everolimus in Combination with Exemestane in the Treatment of Postmenopausal Women with Estrogen Receptor Positive Locally Advanced or Metastatic Breast Cancer who are refractory to Letrozole or Anastrozole (BOLERO 2). (2009-)

Novartis Protocol CRAD001J2301: A Randomize Phase III, Double-Blind, Placebo-Controlled Multicenter Trial of Everolimus in Combination with Trastuzumab and Paclitaxel, as First Line Therapy in Women with HER2 Positive Locally Advanced or Metastatic Breast Cancer (**BOLERO I**). (2009-)

Imcione Protocol CP12-0606/TRIO-012: A Multicenter, Multinational, Randomized, Double-Blind, Phase III Study of iMC-1121 B Plus Docetaxel versus Placebo Plus Docetaxel in Previously Untreated Patients with HER2-negative, Unresectable, Locally-Recurrent or Metastatic Breast Cancer. Protocol IMCL CP12-0606/TRIO-012. (2010 –

Novartis Protocol CRADN2301: A Randomized Double-Blind, Placebo-Controlled, Multicenter phase III Study of RAD001 adjuvant therapy in poor risk patients with Diffuse Large B-Cell Lymphoma (DLBCL) of RAD001 versus matching placebo after patients have achieved complete response with first-line rituximabchemotherapy (**PILLAR 2**) (2010 –

<u>GlaxoSmith Kline Protocol LPT112515</u>: A Randomized, Phase III, Open-Label, Study of Lapatinib plus Trastuzumab versus Trastuzumab as Continued HER2 Suppression Therapy after Completion of First- or Second-line Trastuzumab plus Chemotherapy in Subjects with HER2-positive Metastatic Breast Cancer

(HALT-MBC) (2010 -

Peregrine Protocol PPHM 1001: A Randomized, Open-Label, Phase 2 Trial of Paclitaxel/Carboplatin With or Without Bavituximab in Patients with Previously Untreated Locally Advanced or Metastatic Non-Squamous Non-Small Cell Lung Cancer. (2010 –

<u>Peregrine Protocol PPHM 0902</u>: A Randomized, Double-Blind, Placebo-Controlled Phase 2 Trial of Bavituximab Plus Docetaxel in Patients with Previously Treated Locally Advanced or Metastatic Non-Squamous Non-Small Cell Lung Cancer. (2010 -

Novocure Protocol EF-24/Lunar: Pivotal, randomized, open-label study of Tumor Treating Fields (TTFields) concurrent with standard of care therapies for treatment of stage 4 non-small cell lung cancer (NSCLC) following platinum failure (LUNAR) (2018-).

BeyondSpring Pharmaceuticals Inc. Protocol 450-0001/Dublin-3: Assessment of Docetaxel + Plinabulin Compared to Docetaxel + Placebo in Patients With Advanced NSCLC With at Least One Measurable Lung Lesion (DUBLIN-3) (2017-).

<u>GI Therapeutics Protocol GIT28-05</u>: Phase 2 Study of Carboplatin, Etoposide, and Atezolizumab With or Without Trilaciclib (GIT28) in Patients with Untreated Extensive-Stage Small Cell Lung Cancer (2017-) <u>Pharma Mar Protocol PMII83-C-003-14</u>: Phase III Randomized Clinical Trial of Lurbinectedin (PM0II83)/Doxorubicin (DOX) Versus Cyclophosphamide (CTX), Doxorubicin (DOX) and Vincristine (VCR) (CAV) or Topotecan as Treatment in Patients With Small-Cell Lung Cancer (SCLC) Who Failed One Prior Platinum-containing Line (ATLANTIS Trial) (2016-)

Eli Lilly and Company Protocol LUN 288/I6A-MC-CBBE: A Phase II Study of the Combination of LY3023414 and Necitumumab After First-Line Chemotherapy for Metastatic Squamous Non-small Cell Carcinoma of the Lung (2016-2018)

Hoffmann-La Roche Protocol GO29436: A Phase III, Open-Label, Randomized Study of MPDL3280A (Anti-PD-LI Antibody) In Combination with Carboplatin + Paclitaxel With or Without Bevacizumab Compared With Carboplatin + Paclitaxel + Bevacizumab In Chemotherapy-Naïve Patients With Stage IV Non-Squamous Non-Small Cell Lung Cancer (NSCLC) (2015-)

AstraZeneca Protocol D4191C00004: A Phase III, Open Label, Randomised, Multi-centre, International Study of MEDI4736, Given as Monotherapy or in Combination With Tremelimumab Determined by PD-LI Expression Versus Standard of Care in Patients With Locally Advanced or Metastatic Non-Small Cell Lung Cancer (Stage IIIB-IV) Who Have Received at Least Two Prior Systemic Treatment Regimens Including One Platinum Based Chemotherapy Regimen and Do Not Have Known EGFR TK Activating Mutations or ALK Rearrangements (ARCTIC) (2014-2018)

<u>AstraZeneca Protocol D4191C00001</u>: A Phase III, Randomised, Double-blind, Placebo-controlled, Multi-centre, International Study of MEDI4736 as Sequential Therapy in Patients With Locally Advanced, Unresectable Non-Small Cell Lung Cancer (Stage III) Who Have Not Progressed Following Definitive, Platinum-based, Concurrent Chemoradiation Therapy (PACIFIC) (2014-2017)

Peregrine Protocol PPHM1202: SUNRISE: A Phase III, Randomized, Double-Blind, Placebo-Controlled Multicenter Trial of Bavituximab Plus Docetaxel Versus Docetaxel Alone in Patients With Previously Treated Stage IIIb/IV Non-Squamous Non Small-Cell Lung Cancer (2014-2017)

Breast Cancer Trials

Boehringer Ingelheim BI1280-0022: Xenera-I: A multi-centre, double-blind, placebo-controlled, randomised phase II trial to compare efficacy of xentuzumab in combination with everolimus and exemestane versus everolimus and exemestane in post-menopausal women with HR+ / HER2-metastatic breast cancer and non-visceral disease (2019-)

Daiichi Sankyo Protocol DS8201-A-U303: A Phase-3, multicenter randomized, open-label, activecontrolled trial of DS-8201A, an anti-her2-antibody drug conjugate (ADC) versus treatment of physician's choice for HER2low, unresectable and/or metastatic breast cancer subjects.(2019 -)

Daiichi Sankyo Protocol DS8201-A-U301: A Phase 3, multicenter, randomized, open-label, activecontrolled of DS-8201A, an anti-HER2-antibody drug conjugate, versus treatment of investigator's choice for HER2-positive, unresectable and/or metastatic breast cancer subjects pretreated with prior standard of care HER2 therapies, including T-DMI(2019-)

Novartis Pharmaceuticals Protocol CLAG525B2101: A phase II open-label, randomized, three-arm, multicenter study of LAG525 given in combination with spartalizumab (PDR001), or with spartalizumab and carboplatin, or with carboplatin, as first or second line therapy in patients with advanced triple-negative breast cancer (2018-)

Odonate Therapeutics Protocol ODO-TE-V301: A Multinational, Multicenter, Randomized, Phase 3 Study of Tesetaxel plus a Reduced Dose of Capecitabine versus Capecitabine Alone in Patients with HER2 Negative, Hormone Receptor Positive, Locally Advanced or Metastatic Breast Cancer Previously Treated with a Taxane

Merrimack Pharmaceuticals Protocol MM-121-02-02-10/ Sherboc: Phase 2 Trial of Seribantumab Plus Fulvestrant in Postmenopausal Women With Metastatic Breast Cancer (SHERBOC) (2018-) Macrogenics, Inc. Protocol CP-MGAH22-04: A Phase 3, Randomized Study of Margetuximab Plus Chemotherapy vs Trastuzumab Plus Chemotherapy in the Treatment of Patients With HER2+ Metastatic Breast Cancer Who Have Received Prior Anti-HER2 Therapies and Require Systemic Treatment (2016-) Celgene Corporation Protocol CC-486-BRSTM-001: A Phase 2, Randomized, Open-label, Two-arm Study to Assess the Efficacy and Safety of the Epigenetic Modifying Effects of CC-486 (Oral Azacitidine) in Combination With Fulvestrant in Postmenopausal Women With ER+, HER2- Metastatic Breast Cancer Who Have Progressed on an Aromatase Inhibitor (2015-2017)

Novartis Pharmaceuticals Protocol CLEE011A2404: An Open-label, Multicenter, Phase IIIb Study to Assess the Safety and Efficacy of Ribociclib (LEE011) in Combination With Letrozole for the Treatment of Men and Postmenopausal Women With Hormone Receptor-positive (HR+) HER2-negative (HER2-) Advanced Breast Cancer (aBC) With no Prior Hormonal Therapy for Advanced Disease COMPLEEMENT-I (2017-)

Novartis Pharmaceuticals Protocol CLEE011XUS29: A Phase I/II, Single Arm, Open-label Study of Ribociclib in Combination With Everolimus + Exemestane in the Treatment of Men and Postmenopausal Women With HR+, HER2- Locally Advanced or Metastatic Breast Cancer Following Progression on a CDK 4/6 Inhibitor (2017-)

Novartis Pharmaceuticals Protocol CLEE011XUS29: A Phase I/II, Single Arm, Open-label Study of Ribociclib in Combination With Everolimus + Exemestane in the Treatment of Men and Postmenopausal Women With HR+, HER2- Locally Advanced or Metastatic Breast Cancer Following Progression on a CDK 4/6 Inhibitor (2017-)

Merck Sharp & Dohme Corp. Protocol MK3475-119: A Randomized Open-Label Phase III Study of Single Agent Pembrolizumab Versus Single Agent Chemotherapy Per Physician's Choice for Metastatic Triple Negative Breast Cancer (mTNBC) - (KEYNOTE-119) (2016-2017)

Novartis Protocol CBYL719C2301A: Phase III Randomized Double-blind, Placebo Controlled Study of Alpelisib in Combination With Fulvestrant for Men and Postmenopausal Women With Hormone Receptor Positive, HER2-negative Advanced Breast Cancer Which Progressed on or After Aromatase Inhibitor Treatment (2016-)

Novartis Protocol CLEE011F2301: A Randomized Double-blind, Placebo-controlled Study of Ribociclib in Combination With Fulvestrant for the Treatment of Men and Postmenopausal Women With Hormone Receptor Positive, HER2-negative, Advanced Breast Cancer Who Have Received no or Only One Line of Prior Endocrine Treatment (2015-)

Eli Lilly Protocol I3Y-MC-JPBM: A Randomized, Double-Blind, Placebo-Controlled, Phase 3 Study of Nonsteroidal Aromatase Inhibitors (Anastrozole or Letrozole) Plus LY2835219, a CDK4/6 Inhibitor, or Placebo in Postmenopausal Women With Hormone Receptor-Positive, HER2-Negative Locoregionally Recurrent or Metastatic Breast Cancer With No Prior Systemic Therapy in This Disease Setting (2015-) **Novartis Protocol CLEE011A2301**:A Randomized Double-blind, Placebo-controlled Study of LEE011 in Combination With Letrozole for the Treatment of Postmenopausal Women With Hormone Receptor Positive, HER2 Negative, Advanced Breast Cancer Who Received no Prior Therapy for Advanced Disease (2014-)

Pfizer protocol A5481023: Multicenter, Randomized, Double-Blind, Placebo-Controlled, Phase 3 Trial Of Fulvestrant (Faslodex (Registered)). With Or Without PD-0332991 (Palbociclib) +/- Goserelin In Women With Hormone Receptor-Positive, HER2-Negative Metastatic Breast Cancer Whose Disease Progressed After Prior Endocrine Therapy (2013-)

Puma Biotechnology Protocol PUMA-NER-1301: A Study of Neratinib Plus Capecitabine Versus Lapatinib Plus Capecitabine in Patients With HER2+ Metastatic Breast Cancer Who Have Received Two or More Prior HER2-Directed Regimens in the Metastatic Setting (NALA) (2013-)

<u>Celgene Corporation Protocol ABI-007-MBC-001</u>: A Phase 2/3, Multi-Center, Open-Label, Randomized Study of Weekly Nab®-Paclitaxel in Combination With Gemcitabine or Carboplatin, Compared to Gemcitabine/Carboplatin, as First Line Treatment in Subjects With ER, PgR, and HER2 Negative (Triple Negative) Metastatic Breast Cancer (2013-2017)

F. Hoffmann-La Roche Ltd / Genentech Inc Protocol MO27775: A Randomized, Two-arm, Openlabel, Multicenter Phase II Trial Assessing the Efficacy and Safety of Pertuzumab Given in Combination With Trastuzumab Plus an Aromatase Inhibitor in First Line Patients With HER2-positive and Hormone Receptorpositive Advanced (Metastatic or Locally Advanced) Breast Cancer (2012-)

Pancreatic Cancer Trials

Incyte Corporation INCB 18424-362: A Randomized, Double-Blind, Phase 3 Study of the Janus Kinase (JAK) 1/2 Inhibitor, Ruxolitinib, or Placebo in Combination With Capecitabine in Subjects With Advanced or Metastatic Adenocarcinoma of the Pancreas Who Have Failed or Are Intolerant to First-Line Chemotherapy (The JANUS I Study) (2014-2017)

<u>Gilead Sciences Protocol GS-US-370-1296</u>: A Phase 3, Randomized, Double-blind, Placebo-controlled Study of Gemcitabine and Nab-paclitaxel Combined With Momelotinib in Subjects With Previously Untreated Metastatic Pancreatic Ductal Adenocarcinoma Preceded by a Dose-finding, Lead-in Phase (2014-2017)

Ovarian Cancer Trials

<u>Tesaro, INC. Protocol PR-30-5020-C</u>: A Phase 2, Open-Label, Single-Arm Study to Evaluate the Safety and Efficacy of Niraparib in Patients With Advanced, Relapsed, High-Grade Serous Epithelial Ovarian, Fallopian Tube, or Primary Peritoneal Cancer Who Have Received Three or Four Previous Chemotherapy Regimens (2016-2018)

Prostate Cancer Trials

Roche Ltd Protocol CO39303 IPATential 50: Ipatasertib Plus Abiraterone Plus Prednisone/Prednisolone, Relative to Placebo Plus Abiraterone Plus Prednisone/Prednisolone in Adult Male Patients With Metastatic Castrate-Resistant Prostate Cancer (IPATential 150) (2017-)

Bayer Healthcare Pharmaceuticals Protocol BAY 1841788 / 17777: A randomized, double–blind, placebo–controlled Phase III study of ODM–201 versus placebo in addition to standard androgen deprivation therapy and docetaxel in patients with metastatic hormone–sensitive prostate cancer

Janssen Research & Development, LLC on behalf of Aragon Pharmaceuticals, Inc. Protocol 56021927PCR3003: A Randomized, Double-blind, Placebo-controlled Phase 3 Study of JNJ-56021927 in Subjects With High-risk, Localized or Locally Advanced Prostate Cancer Receiving Treatment With Primary Radiation Therapy (ATLAS) (2016-)

Sotio a.s. SP005: A Randomized, Double Blind, Multicenter, Parallel-group, Phase III Study to Evaluate Efficacy and Safety of DCVAC/PCa Versus Placebo in Men With Metastatic Castration Resistant Prostate Cancer Eligible for 1st Line Chemotherapy (2014-)

Colorectal Cancer Trials

AbbVie Protocol M14-064: Phase 2 Study Comparing Efficacy and Safety of ABT-165 plus FOLFIRI vs Bevacizumab plus FOLFIRI in Metastatic Colorectal Cancer Previously Treated with Fluoropyrimidine/Oxaliplatin and Bevacizumab.(2018-)

Lymphoma Trials

Bayer Healthcare Pharmaceuticals Inc., Protocol BAY 80-6946 / 17833: A Phase III, randomized, double-blind, controlled, multicenter study of intravenous PI3K inhibitor copanlisib in combination with standard immunochemotherapy versus standard immunochemotherapy in patients with relapsed indolent non-Hodgkin's lymphoma (iNHL) - CHRONOS-4 (2018-)

TG Therapeutics, Inc Protocol UTX-TGR-205: A Phase 2b Randomized Study to Assess the Efficacy and Safety of the Combination of Ublituximab + TGR-1202 and TGR-1202 Alone in Patients With Previously Treated Diffuse Large B-Cell Lymphoma (2016-)

Novartis Protocol OFB114612: A Phase II Open-Label Study of Ofatumumab and Bendamustine Followed by Maintenance Ofatumumab for Indolent B-cell Non-Hodgkin's Lymphoma (B-NHL) Which Has Relapsed after Rituximab Therapy (2011-2017)

Novartis Protocol CRAD001N2301: A Randomized, Double-blind, Placebo-controlled, Multi-center Phase III Study of RAD001 Adjuvant Therapy in Poor Risk Patients With Diffuse Large B-Cell Lymphoma (DLBCL of RAD001 Versus Matching Placebo After Patients Have Achieved Complete Response With Firstline Rituximab-chemotherapy (2010-2016)

Myeloma Trials

<u>Merck Sharp & Dohme MK-3475-183-01</u>: A Phase III Study of Pomalidomide and Low Dose Dexamethasone With or Without Pembrolizumab (MK3475) in Refractory or Relapsed and Refractory Multiple Myeloma (rrMM) (**KEYNOTE 183**) (2016-)

<u>Millennium Pharmaceuticals Protocol C16014</u>: A Phase 3, Randomized, Double-Blind, Multicenter Study Comparing Oral IXAZOMIB (MLN9708) Plus Lenalidomide and Dexamethasone Versus Placebo Plus Lenalidomide and Dexamethasone in Adult Patients With Newly Diagnosed Multiple Myeloma (2013-)

CLL Trials

TG Therapeutics Protocol UTX-TGR-304: A Phase 3, Randomized Study to Assess the Efficacy and Safety of Ublituximab in Combination with TGR-1202 Compared to Obinutuzumab in Combination with Chlorambucil in Patients with Chronic Lymphocytic Leukemia (CLL) (2016-)

<u>TG Therapeutics Protocol UTX-IB-301</u>: Ublituximab in Combination With Ibrutinib Versus Ibrutinib Alone in Patients With Previously Treated High-Risk Chronic Lymphocytic Leukemia (CLL) (2015-) <u>Genentech Protocol ML29538</u>: A Phase II, Open-Label Study Of Obinutuzumab Plus Bendamustine (BG) In Patients With Previously Untreated Chronic Lymphocytic Leukemia (2015-)

Melanoma Cancer Trials

Merck Sharp & Dohme Corp. Protocol 7902-004: A Multicenter, Open-label, Phase 2 Trial to Assess the Efficacy and Safety of Lenvatinib (E7080/MK-7902) in Combination with Pembrolizumab (MK-3475) in Participants with Advanced Melanoma Previously Exposed to an Anti-PD-1/L1 Agent (LEAP-004) **Polynoma LLC Protocol 103A-301**: 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 (2015-)

Head & Neck Cancer Trials

Merck Sharp & Dohme Protocl MK-3475-040-10: A Phase III Randomized Trial of MK-3475 (Pembrolizumab) Versus Standard Treatment in Subjects With Recurrent or Metastatic Head and Neck Cancer (2016-)

Urothelial Carcinoma Trials

<u>Merck Sharp & Dohme Corp. Protocol MK3475-361</u>: A Phase III Randomized, Controlled Clinical Trial of Pembrolizumab With or Without Platinum-Based Combination Chemotherapy Versus Chemotherapy in Subjects With Advanced or Metastatic Urothelial Carcinoma (2016-)

Renal Cell Carcinoma Trials

Bristol-Myers Squibb Protocol CA 209-920: Phase 3b/4 Safety Trial of Nivolumab Combined With Ipilimumab in Subjects With Previously Untreated, Advanced or Metastatic RCC (CheckMate 920: CHECKpoint Pathway and nivoluMAb Clinical Trial Evaluation 920) (2017-)

Registry trials

Guardant Health Protocol 01-MX-003: GEODE: Registry of Guardant360® Use and Outcomes In People With Advanced Cancer