Society for Immunotherapy of Cancer

ADVANCES IN Cancer IMMUNOTHERAPY™

Cases/Local Clinical Trials

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AAEM AMERICAN ACADEMY OF EMERGENCY MEDICINE CHAMPION OF THE EMERGENCY PHYSICIAN

ACCC Association of Community Cancer Centers

HOPA Hematology/Oncology Pharmacy Association

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#LearnACI

Disclosures

- Consulting Fees: AstraZeneca, BluePrint Medicines, Daiichi Sankyo
- Contracted Research: Merck, BMS, Takeda, Helsinn, Jounce Therapeutics, Pfizer, Daiichi Sankyo, Mirati Therapeutics
- I will be discussing non-FDA approved indications during my presentation.

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Case #1

- 66 yo F, former 15 pk-yr smoker, presented with weight loss, dyspnea, cough. Mediastinal lymphadenopathy with bilateral lung nodules, liver and adrenal metastases
- Stage IV lung adenocarcinoma
  - EGFR, ALK, ROS1 wild-type
- Treatments:
  - Carboplatin/pemetrexed x 6 cycles
  - Maintenance pemetrexed x 4 months
  - Docetaxel, 11 months
  - Gemcitabine, 4 months
- Started Nivolumab 2015, (no PDL1 testing)

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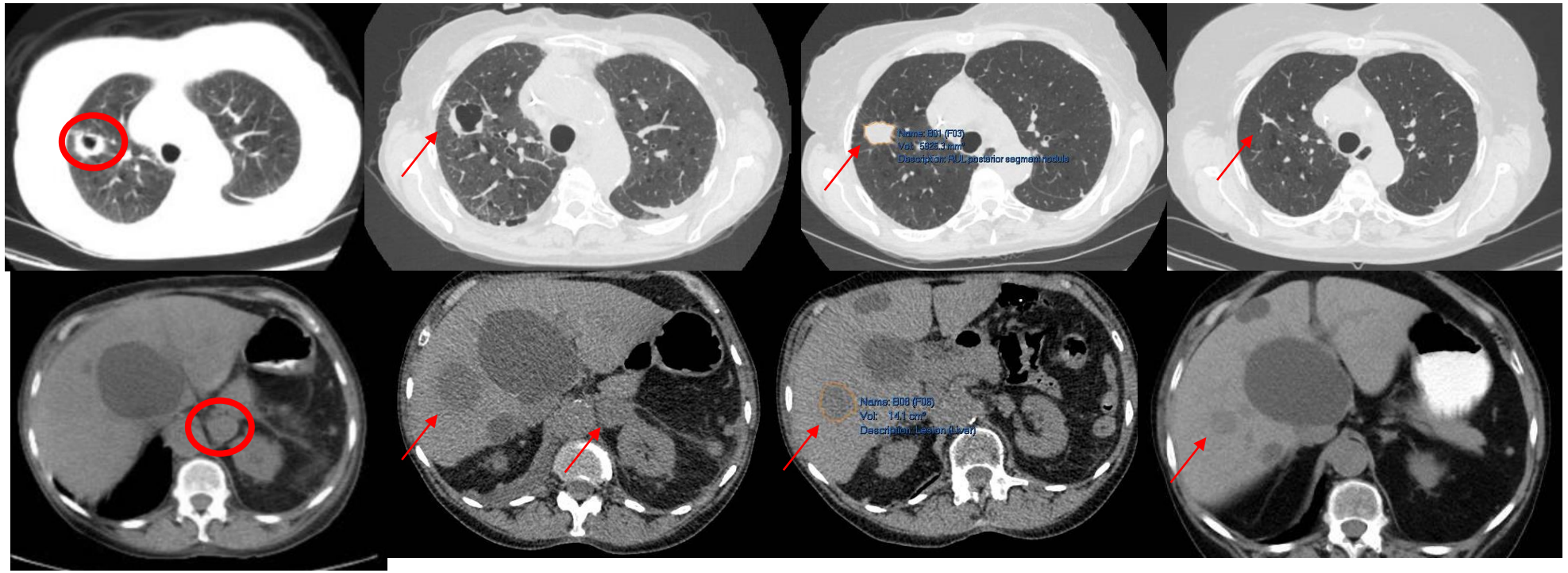
Baseline | 2 months | 4 months | 10 months



Nivolumab started

Progression,
-new liver met
-new pulm nodules

Nivolumab continued

Developed uveitis, grade 2
Topical steroids

7 Months
Uveitis + cataracts, held nivo 1 month, prednisone 1 mg/kg

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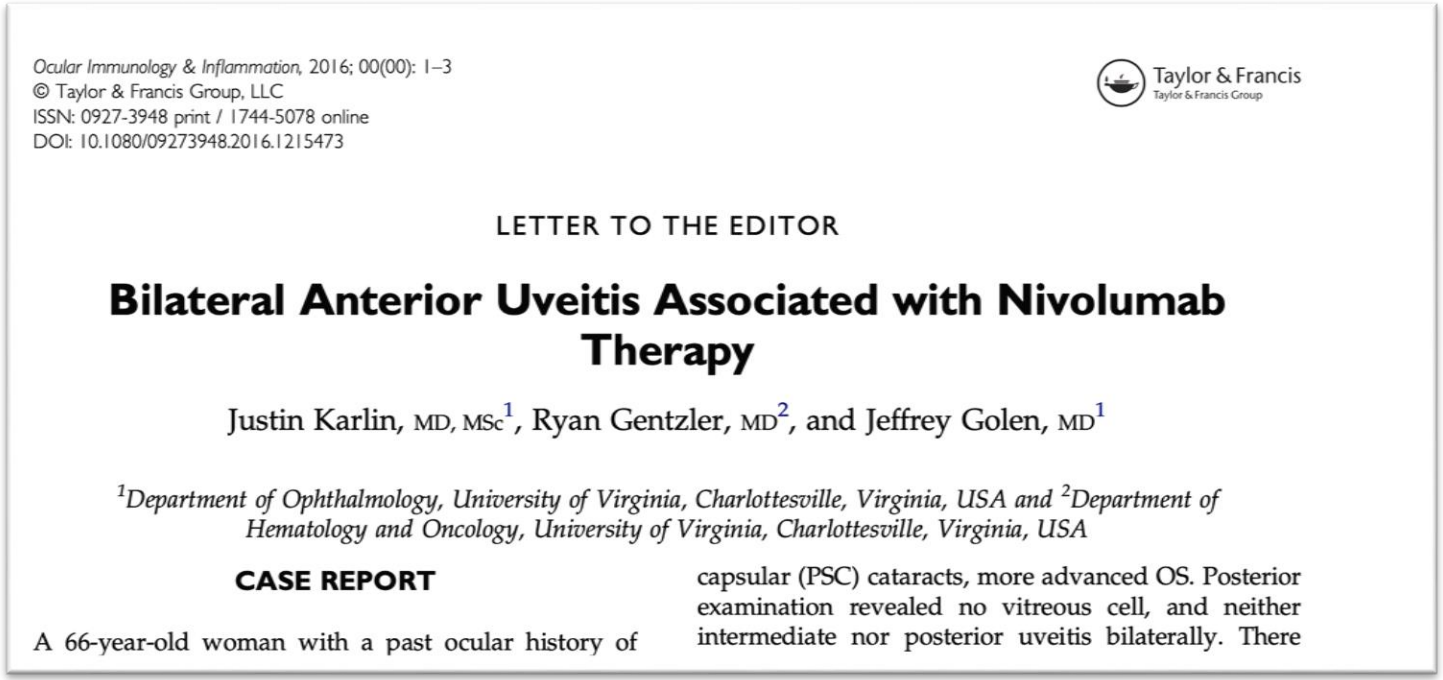
irAE – Anterior Uveitis



Ocular Immunology & Inflammation, 2016; 00(00): 1–3
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LETTER TO THE EDITOR

Bilateral Anterior Uveitis Associated with Nivolumab Therapy

Justin Karlin, MD, MSc[1], Ryan Gentzler, MD[2], and Jeffrey Golen, MD[1]

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CASE REPORT

A 66-year-old woman with a past ocular history of capsular (PSC) cataracts, more advanced OS. Posterior examination revealed no vitreous cell, and neither intermediate nor posterior uveitis bilaterally. There

Topical prednisolone 1%
Cyclopentolate 2%

Symptomatic improvement

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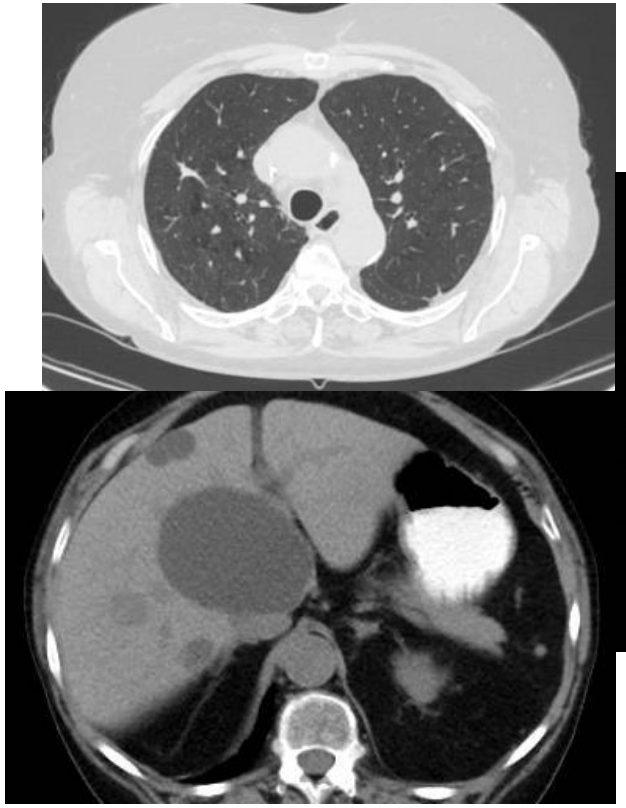
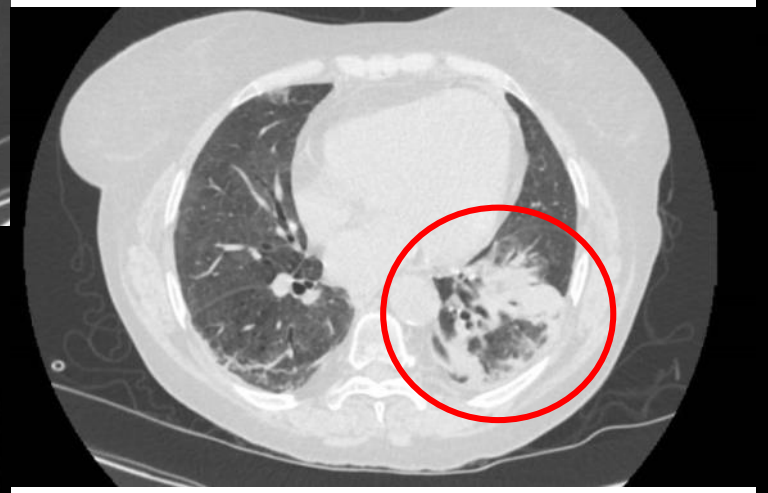
10 months



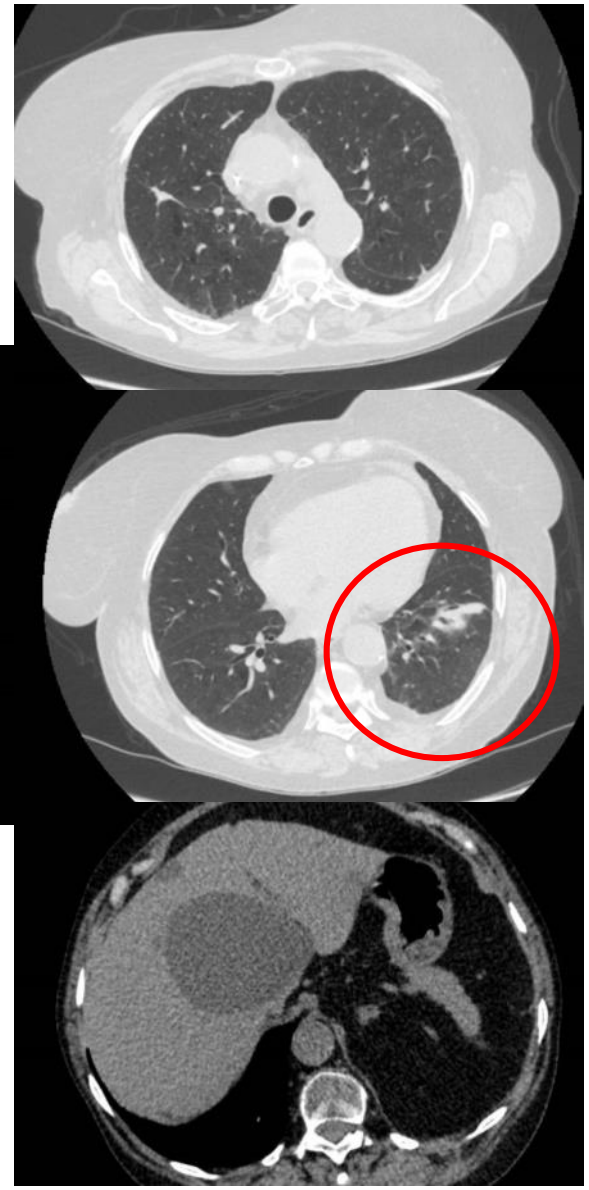
12 months



Pneumonitis requiring O2 and hospitalization

- Bronchoscopy: lymphocyte predominate, negative for infectious etiology
- Prednisone 1 mg/kg
- Discharged w/o oxygen

14 months



Stable disease
Resolution of pneumonitis

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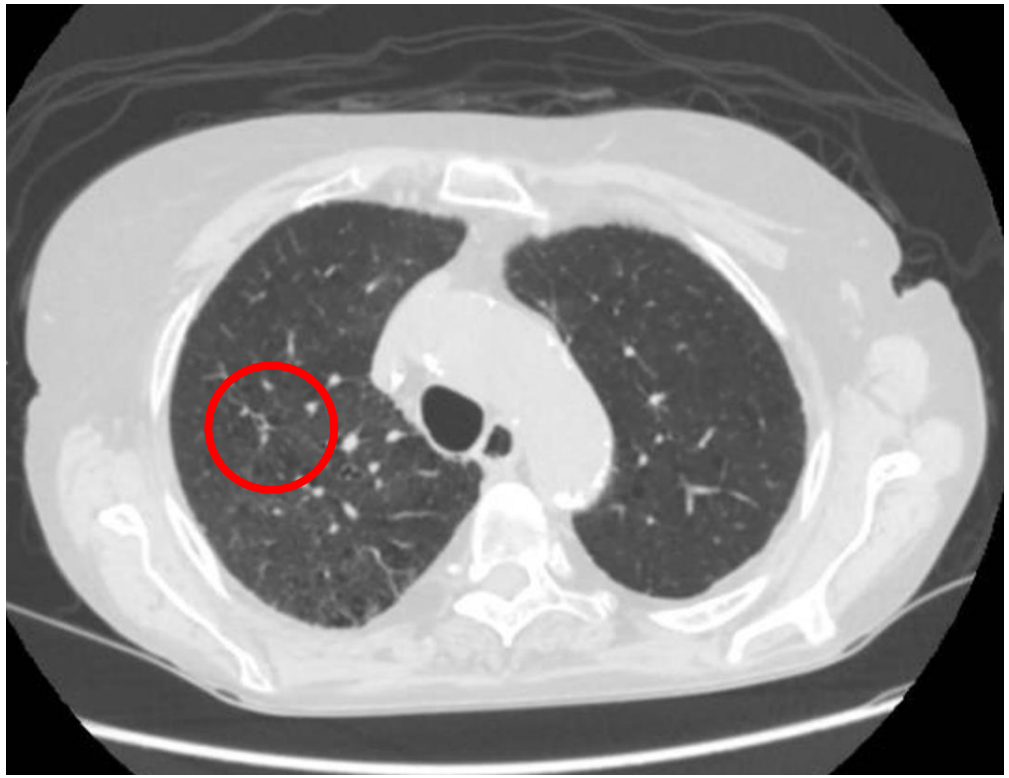
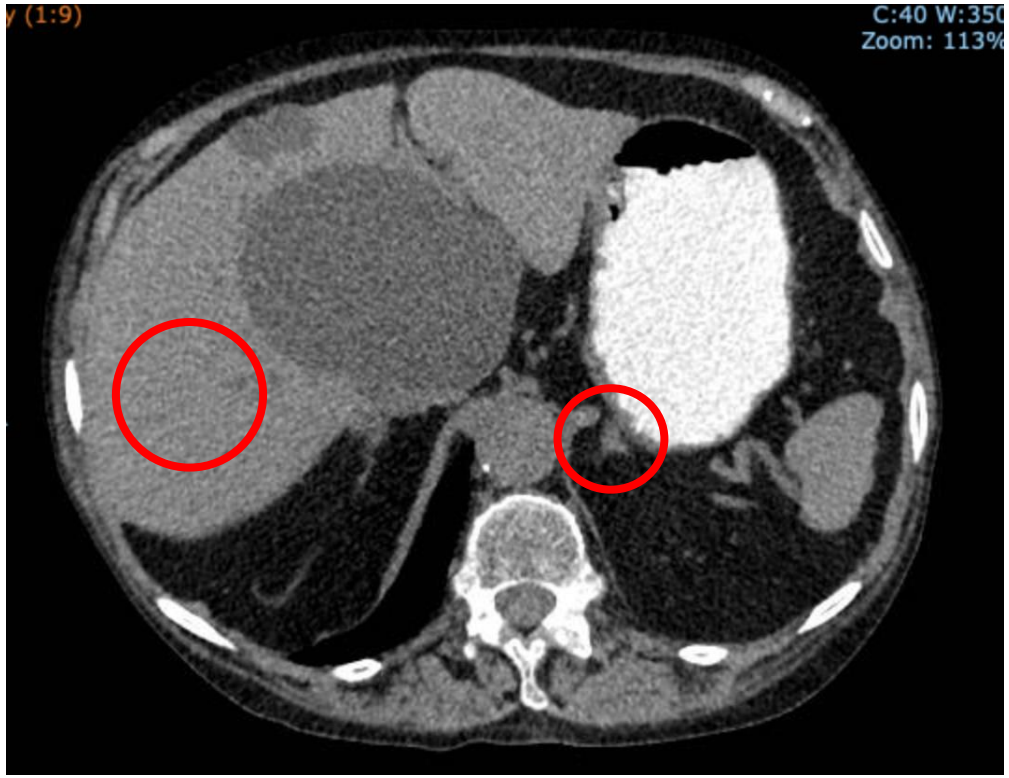
5 years after nivolumab





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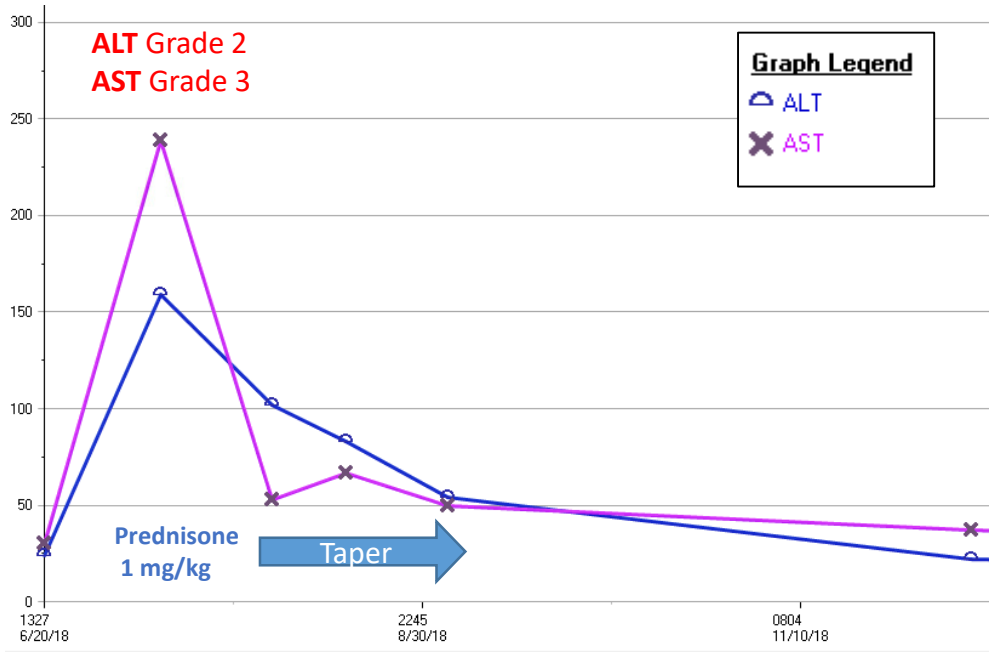
Case #2

- 82 yo F with Squamous Cell Carcinoma, Left lower lobe
- cT1bN2M0, Stage IIIA
- PDL1 60%
- PMH: Psoriasis
- Never-smoker, +wood fire cooking, Refugee from West Africa in 17 yrs ago
- ECOG 1
- Declined chemotherapy/radiation
- Pembrolizumab given

	Ref. Range	6/20/2018 1327	7/12/2018 1138	8/2/2018 1257	8/16/2018 1223	9/4/2018 1603
ALT	Latest Ref Range: <55 U/L	24	159 ▲	102 ▲	83 ▲	54
AST	Latest Ref Range: <35 U/L	30	239 ▲	53 ▲	67 ▲	50 ▲



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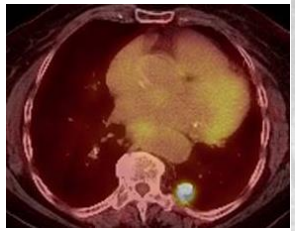
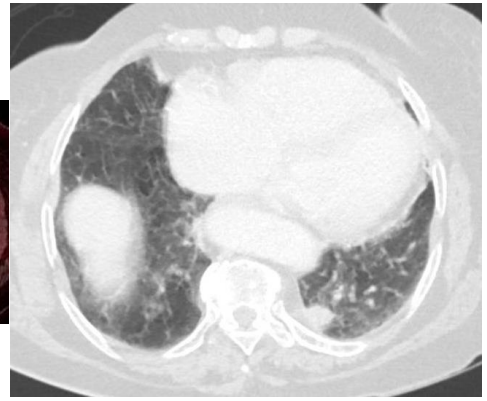
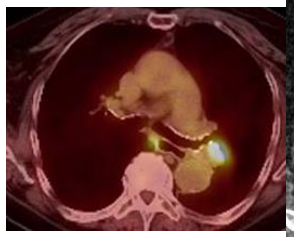
Case #2 Imaging

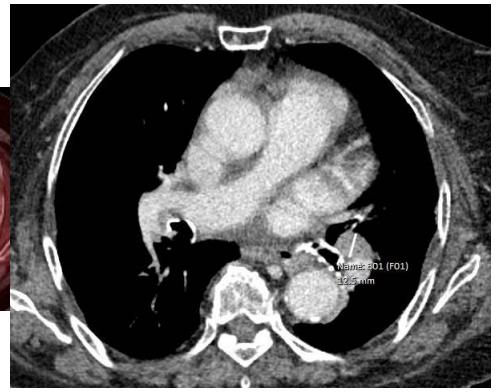
Baseline

Pembrolizumab 200 mg x1







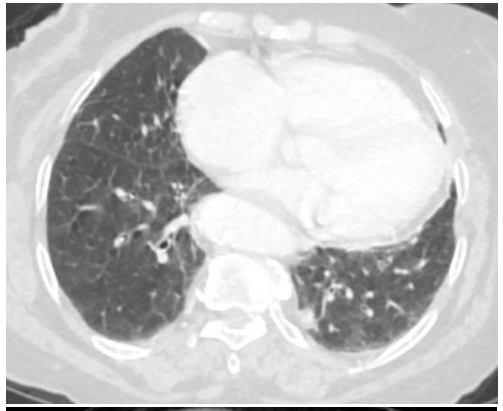


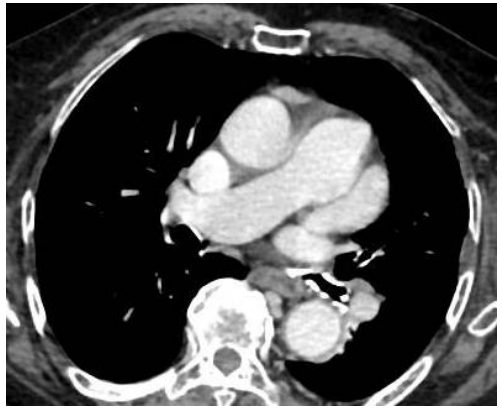
1.5 cm nodule
1.2 cm hilar node

3 weeks

Grade 3 irAE
Prednisone start

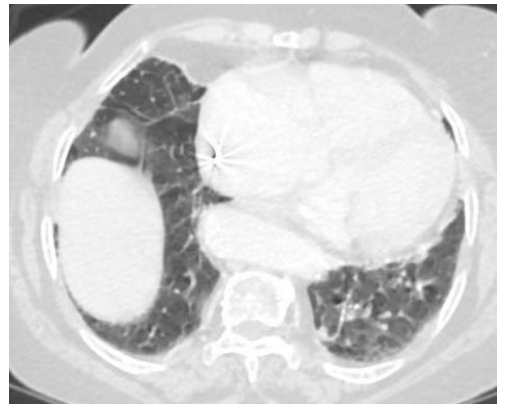
10 weeks

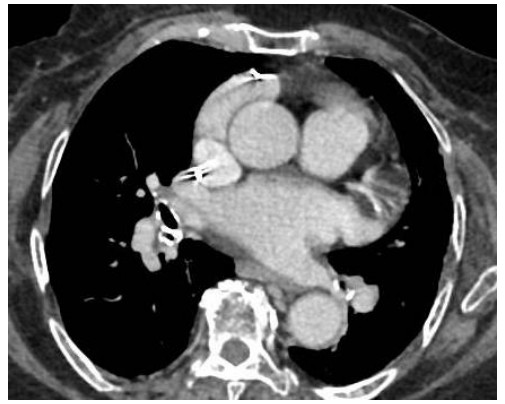




0.7 cm nodule
0.7 cm hilar node

2.5 yrs





Stable disease

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UVA Cancer Center Clinical Trials

- Immunotherapy trial highlights

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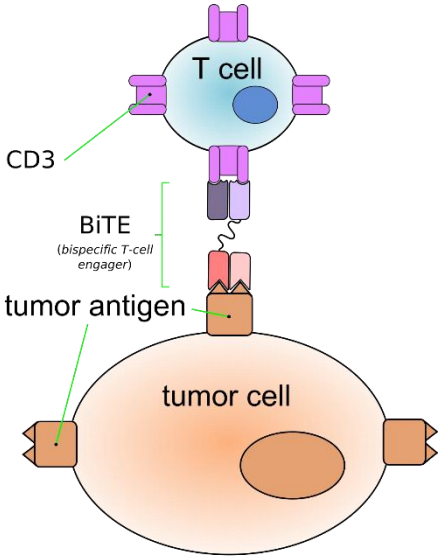
UVA Trials - GU

BiTE

- CALIBR (NCT04077021)
  - A Phase-1, Open-Label Study in Two Parts, Evaluating the Safety, Tolerability, Pharmacokinetics, Pharmacodynamics and Clinical Activity of CCW702 in Patients with Metastatic, Castration Resistant **Prostate** Adenocarcinoma

BiTE
Bispecific
T-cell
Engager



Key Eligibility:

- Metastatic castrate resistant prostate cancer
- Must have at least 1 prior: abiraterone, enzalutamide
- 1 prior chemo regimen permitted
- ECOG 0-1
- Testosterone ≤ 50 ng/mL
- No symptomatic heart disease; MI or stroke within 6 months
- No neuropathy grade 2 or higher
- No untreated cord compression

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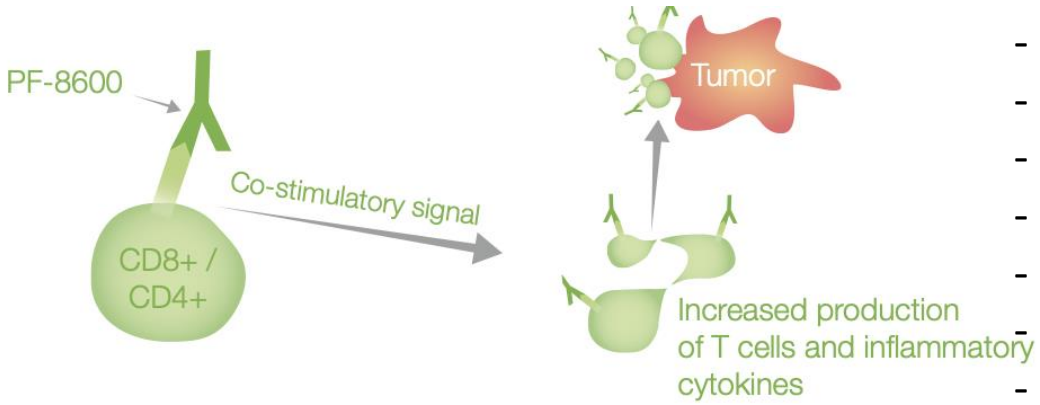
https://en.wikipedia.org/wiki/Bi-specific_T-cell_engager

UVA Trials – GU

OX40

- 4K-16-5 (NCT03092856):
  - Phase II Randomized Double Blind Trial of PF-04518600, an OX40 Antibody, in Combination with Axitinib versus Axitinib in Immune-Checkpoint Inhibitor Exposed Patients with Metastatic Renal Cell Carcinoma

n=104



<u>Key Eligibility:</u>

- Metastatic RCC s/p nephrectomy
- Progressed on VEGF inhibitor AND PD-1/PD-L1 (combo or sequential)
- Tissue obtained within 12 weeks of enrollment
- ECOG 0-2
- CrCl = 40+
- No prior mTOR inhibitor, no prior axitinib
- No Active malignancy within 3 yrs
- No h/o Gr 3 or higher irAE
- No CHF, MI, Stroke in last 6 months

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UVA Trials – H&N

PD-1 Neoadjuvant

- Keynote 689 (NCT03765918):
  - Study of Pembrolizumab given prior to surgery and in combination with radiotherapy given post-surgery for stage III-IV resectable head and neck squamous cell carcinoma (MK-3475-689)

Key Eligibility:

- HPV +, T4N0-2M0
- HPV -, Stage III/IVA – larynx, hypopharynx/oral cavity
- Candidate for surgery
- ECOG 0-1
- No prior therapy
- No Grade ≥2 audiometric hearing loss
- No Grade ≥2 neuropathy
- No Grade 3-4 bleeding due to the underlying malignancy

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UVA Trials – H&N

Vaccine

- VERSATILE-002 (NCT04260126):
  - Study of PDS0101 and pembrolizumab combination IO in subjects with HPV+ recurrent/metastatic HNSCC

PDS0101
Liposomal HPV vaccine

Key Eligibility:

- HPV + SCC H&N
- PDL1 1%+
- No prior immunotherapy
- Measurable disease by RECIST 1.1
- Recovered from side effects of surgery or radiation
- ECOG 0-1
- No neuropathy Grade 2 or higher
- No active HIV, HBV, HCV
- No transfusion or GCSF within 30 days

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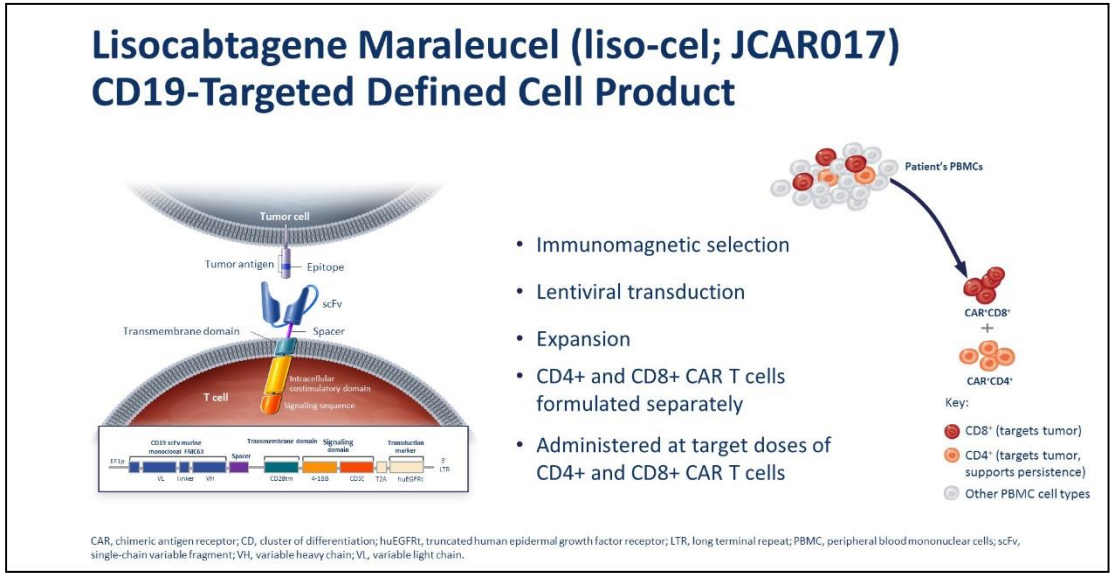
UVA Trials – Lymphoma

CAR-T

- TRANSEND FL (NCT04245839):
  - Phase II study to evaluate efficacy and safety of JCAR017 anti-CD19 for relapsed/refractory follicular, marginal zone lymphoma



Siddiqi T, et al. ASCO 2019:abst:7501
FDA approved 2/5/21 for DLBCL

Key Eligibility:

- FL (Gr 1-3a), MZL
- At least 1 prior anti-CD20 and alkylating agent
- MZL at least 2 prior lines of therapy
- ECOG 0-1
- Adequate vacular access for leukophoresis
- No composite DLBCL/FL or transformed FL
- No Primary CNS lymphomas
- No Prior CAR-T therapy
- No GVHD

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UVA Trials – Multiple Myeloma

CAR-T

- BMT CTN Q1 2022:
  - Phase II Multicenter Trial of anti-B Cell Maturation Antigen Chimeric Antigen Receptor T Cell Therapy for Multiple Myeloma Patients with Sub-Optimal Response After Autologous Hematopoietic Cell Transplantation and Maintenance Lenalidomide

BLOOD AND MARROW TRANSPLANT CLINICAL TRIALS NETWORK

**Tamila Kindwall-Keller, Co-PI on cooperative group study

Key Eligibility:

- Prior induction and Melphalan/Auto-SCT
- Stored stem cells available
- <12 months since auto-SCT
- At least 6 months of maintenance lenalidomide
- No disease progression
- Less than VGPR
- KPS 70+
- No CNS involvement

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UVA Trials – Leukemia/MDS

CTLA4

- ETCTN 10026 (NCT02890329):
  - Ipilimumab and Decitabine in Treating Patients With Relapsed or Refractory Myelodysplastic Syndrome or Acute Myeloid Leukemia

ETCTN
Experimental Therapeutics Clinical Trials Network
Team Driven. Cancer Therapy Focused.

<u>Key Eligibility:</u>

- Relapsed, or Refractory MDS or AML
- Tx Naïve MDS/AML, age 75+ or therapy-related AML
- ECOG 0-2
- No known CNS involvement
- No progression on hypomethylating agent within 12 weeks
- No GVHD Gr 3-4

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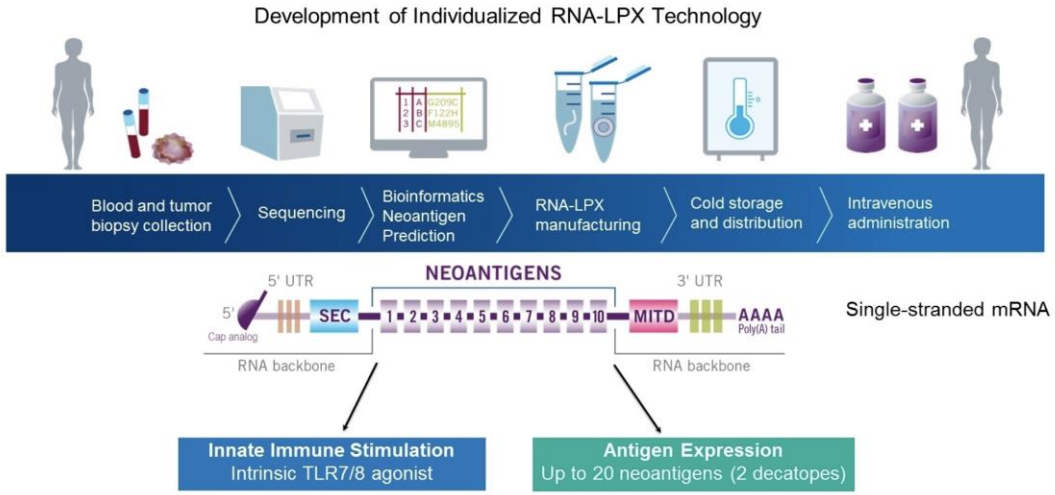
UVA Trials – Melanoma

Personalized RNA Vaccine

- IMCODE001 (NCT03815058)
  - A study to evaluate efficacy and safety of RO7198457 (personalized vaccine) in combination with pembrolizumab versus pembrolizumab alone in participants with previously untreated advanced melanoma



Lopez JS, et al. AACR 2020, abst:CT301

Key Eligibility:

- Tx Naïve advanced melanoma
- ECOG 0-1
- Tumor specimen available
- No ocular/uveal melanoma
- Active CNS metastases

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UVA Trials – Cutaneous SCC

PD-1 Adjuvant

- R2810-ONC-1788 (NCT03969004)
  - Study of adjuvant cemiplimab versus placebo after surgery and radiation therapy in patients with high-risk cutaneous squamous cell carcinoma

Key Eligibility:

- Resected cutaneous SCC
- High risk features
- ECOG 0-1
- No Concurrent malignancy within 3 years, including indolent hematologic malignancies
- No History of cutaneous SCC with visceral or nodal metastases

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UVA Trials – GYN: Cervical

PD-1 Concurrent

- GOG 3047 (NCT04221945):
  - A Randomized, Phase 3, Double-Blind Study of Chemoradiotherapy With or Without Pembrolizumab for the Treatment of High-risk, Locally Advanced Cervical Cancer (KEYNOTE-A18 / ENGOT-cx11)

Key Eligibility:

- FIGO 2014 Stage IB2-IIB (with node-positive disease) or FIGO 2014 Stages III-IVA
- Cisplatin eligible
- No prior therapy, surgery
- ECOG 0-1
- Tissue requirement
- RECIST 1.1 measurable disease
- No Prior hysterectomy
- Any contraindication to brachytherapy

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UVA Trials – GYN: Cervical

PD-L1 + Chemo

- GOG 3030 (BEATcc): NCT03556839
  - A Randomized Phase III Trial of Platinum Chemotherapy plus Paclitaxel with Bevacizumab and Atezolizumab versus Platinum Chemotherapy plus Paclitaxel and Bevacizumab in Metastatic (stage IVB), Persistent, or Recurrent Carcinoma of the Cervix

<u>Key Eligibility:</u>

- Metstatic (Stage IVB) cervical cancer
- Adeno, SCC, adenosquamous histology
- RECIST 1.1 measurable disease
- Tumor specimen
- No disease involving the bladder or rectum
- No bilateral hydronephrosis
- No prior chemo (prior concurrent chemoRT allowed)
- No prior VEGF, CD137, PD-1/PD-L1, CTLA4
- No brain mets

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UVA Trials – Lung

Neoadjuvant/Adjuvant PD-1/PD-L1

Neoadjuvant

- CHIO3 (AFT-46) (NCT04062708)
  - single arm phase 2
  - Chemo + durvalumab
  - Stage IIIA/B surgically resectable
  - NSCLC
- Keynote 671, (NCT03425643)
  - randomized phase 3
  - Chemo + pembrolizumab/placebo
  - Stage IB-IIIA surgically resectable
  - NSCLC

Adjuvant

- BTCRC-LUN18-153 (NCT04317534)
  - 1 year pembrolizumab q4 wks
  - Stage I (1.0-4.0 cm) resected NSCLC
- ALCHEMIST Chemo-IO (NCT04267848)
  - Stage IB (4.0 cm) – IIIA
  - Adjuvant chemo+pembrolizumab

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Thank you!

- Questions?

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