Virginia Long-Term Care Clinician Network Monthly Forum

March 19, 2025

Welcome!

As you join, please turn on cameras and mic or unmute your phone and say hello to your Virginia colleagues.

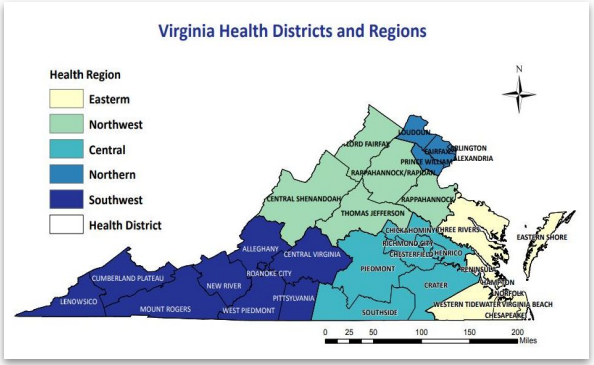
Please use the chat box:

Your name

During the Forum take advantage of chat to share resources/ links with colleagues.

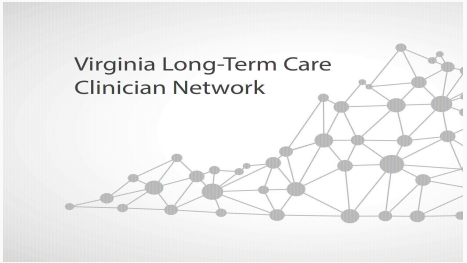
Welcome New Members!

Candace Young - Southwest
Hannah Brooks - Eastern, Central, Southwest
Brenett Dickerson - Central
Fajr Mills - Central
Christopher Cook - Eastern
Caroline Ottoviani - Northern
Steve Mack - Central



Text your work colleagues right now to attend so they can get Education, Support and CME!

297 Members Strong!



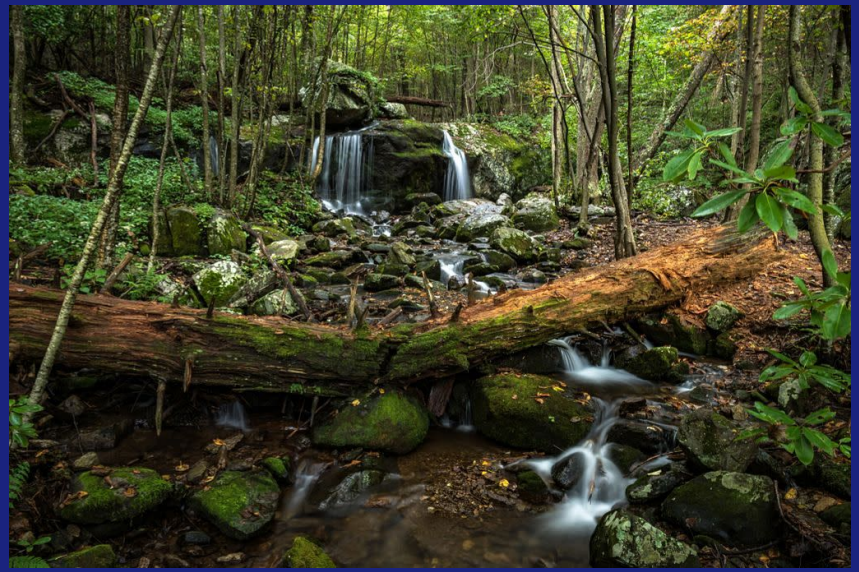
For great resources: look for previous slide sets and newsletters under *Forums & Events* and *Resources* on our website.

ltccn.vcu.edu

Chat Waterfall

In Chat, respond to the question below, but don't hit the send button yet! Wait for the countdown…

Do your offices have in person parties or celebrations anymore since COVID? How are good things celebrated? How about the nursing homes? Do you attend?

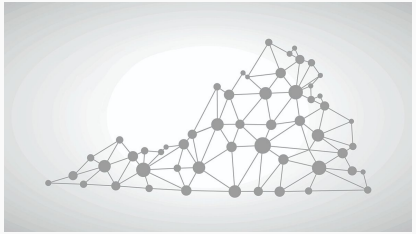


Apple Orchard Falls Jefferson National Forest
https://www.virginia.org/things-to-do/outdoors/waterfalls/

Poll

?

A. Yes
B. No
C. Unsure



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New Onset Adrenal Insufficiency

in a long term care patient receiving treatment for metastatic melanoma

Cancer survivorship and unfamiliar complications in the dawn of immunotherapy

John Gilstad, MD

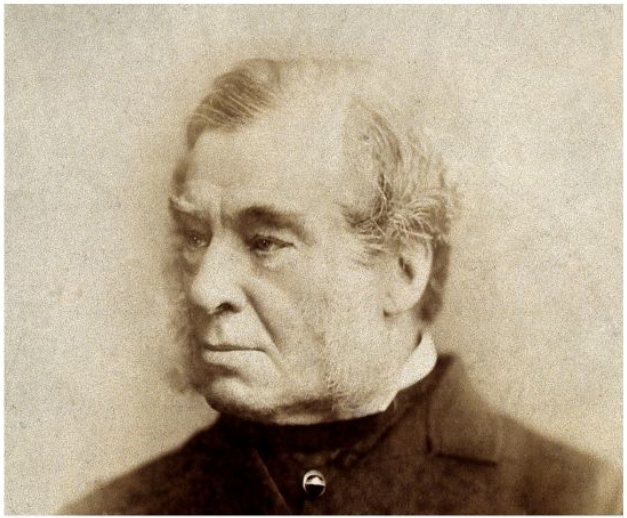
Internal Medicine and Geriatrics

Virginia LTC Network, 19 Mar 2025

POLL

- What year did Thomas Addison publish his classic “On the constitutional and local effects of diseases of the suprarenal capsules”?

A. 1564
B. 1855
C. 1901
D. 1950



https://commons.wikimedia.org/w/index.php?curid=35152865

POLL

- What year did Thomas Addison publish his classic “On the constitutional and local effects of diseases of the suprarenal capsules”?

A. 1564 Eustachio describes the adrenal in *Opuscola Anatomica*

B. 1855 Addison’s famous paper

C. 1901 Takamine patents adrenalin (epinephrine)

D. 1950 Kendall, Reichstein, and Hench share a Nobel Prize for cortisone

Case vignette – setting the stage

- 59 year old LTC resident receiving monthly outpatient nivolumab/relatlimab (Opdualag) at an oncology clinic 40 minutes away, for metastatic melanoma
  - Original onset of thumb growth summer 2021, concern of melanoma in Feb 2022, with axillary node involvement; at that time the patient was a manager at a McDonalds.
  - In May 2022, just prior to planned thumb amputation and axillary node dissection, patient suffered pontine hemorrhage with left hemiparesis and aphasia associated with new brain metastasis.
  - Hospital stay complicated by bacteremia, intubation/trach, bilateral DVT with IVC filter, temporary PEG. Thumb amputed in June, 40Gy whole brain irradiation completed in Aug. Started outpt immunotherapy for the melanoma.
- Joined us in Sep 2022 from another SNF to be closer to family
- Active in physical therapy, pursuing possible left hip arthroplasty for symptomatic femoral neck necrosis: aims to walk again
- Current meds: apixaban, tamsulosin, pantoprazole, memantine, trazodone

Case vignette – present illness phase 1

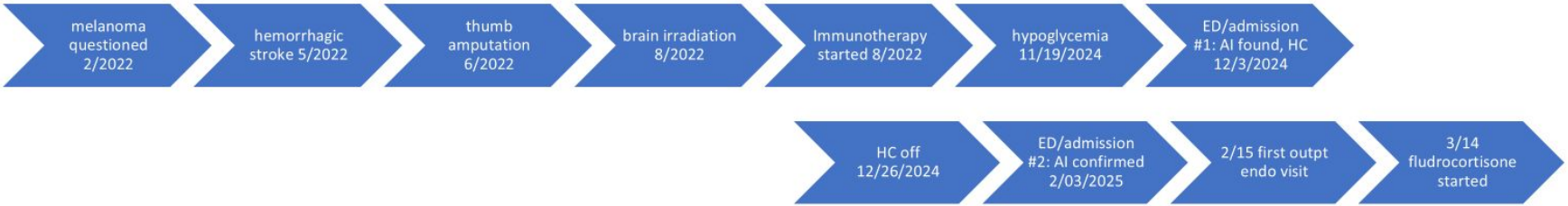
- Received routine monthly Opdualag infusion 15 Nov 2024. Next infusion scheduled 13 Dec, next clinic visit 27 Dec.
- 19 Nov AM finger stick BG 66; monitoring for a week showed normalizing hypoglycemia: 83, 83, 76, 134, 105. BP normal. Concurrent lethargy and poor po intake, attributed to oral sores and assumed progression of brain mets.
- 3 Dec FSBG 44, 184 after iv dextrose, 91 the next AM but worsening confusion => transfer to hospital where BP 70/30 and BG 44. Treated for presumed bacterial sepsis, no clear source initially but RML/RLL dense infiltrate developed.
- 6 Dec adrenal insufficiency recognized, confirmed with ACTH stim
  - Adrenals appear normal on CT abdomen 6 Dec, pituitary not commented on in MRI brain 11 Dec, ACTH (primary vs secondary) recommended by endo not obtained in hospital
- 17 Dec pt returned to us
  - on hydrocortisone taper to maintenance 10mg AM, 5mg afternoon, as BP allows
  - with new Stage 3 pressure sore left heel

Case vignette – present illness phase 2

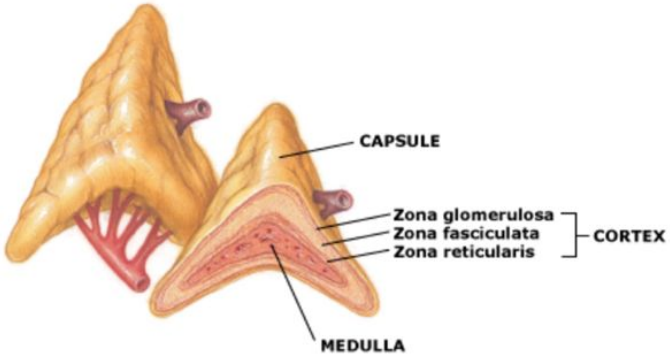
- Hydrocortisone taper to maintenance interpreted as taper to off, stopped Dec 26
- Jan 10 oncology clinic visit:
  - note reflects awareness of severe pneumonia admission and clinical impression of incomplete post-hospital recovery; but not awareness of adrenal insufficiency diagnosis
  - Opdualag infusion postponed, to prioritize heel wound healing, in view of evidence for no active cancer: negative PET in October, negative pan-CT in December, and negative circulating tumor DNA.
- Late Jan recurrence of lethargy, anorexia (mirtazapine started 29 Jan)
- Feb 3 sent to hospital for confusion in the setting of progressive lethargy. Restarted on hydrocortisone, returned to SNF on 7 Feb.
- 15 Feb saw outpt endocrine, HC dose reduced to promote wound healing, provided sick day rules and medical alert bracelet rec, requested followup in a month
- 15 Mar text coordination with endo: add fludrocortisone based on low BP, low aldo.

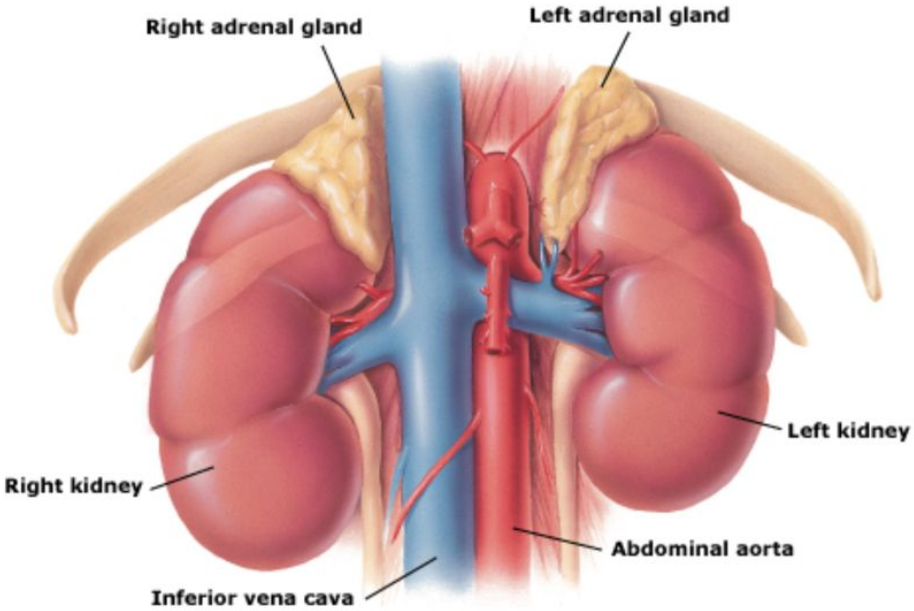
Outline of the talk

- Case vignette
- Adrenal overview; recognition and management of adrenal insufficiency
- Landscape of cancer immunotherapy (checkpoint inhibitors) and side effects
- Checkpoint inhibitors in melanoma
- Discussion



Adrenal overview





https://www.uptodate.com/contents/surgical-anatomy-of-the-adrenal-glands?search=adrenal%20gland&source=search_result&selectedTitle=3%7E150&usage_type=default&display_rank=3

1° adrenal insufficiency

Causes

- autoimmune (isolated or polyendocrine)
- adrenal hemorrhage (sepsis, anticoagulation)
- adrenal mets (lung, breast, colon, melanoma)
- infection (TB, candida, histo, syphilis)
- drugs (exogenous suppression; ketoconazole)

Recognition

- fatigue, weight loss, postural dizziness, anorexia
- low BP; hypoNa, hyperK, hypoglycemia

Crisis

- severe weakness, syncope, abdominal pain, back pain
- hypotension, abdominal tenderness/guarding, delirium

Management

Chronic:

- 15-25mg hydrocortisone daily, divided 2/3 AM and 1/3 PM, titrate to symptoms
- 0.05 to 0.1mg fludrocortisone if asx but hypotensive and high renin; titrate to BP + electrolytes, renin

Sick day rules:

- Rule 1: double the oral maintenance dose for fever or illness requiring bed rest
- Rule 2: inject IM or IV if severe illness, trauma, persistent vomiting, surgery

Crisis:

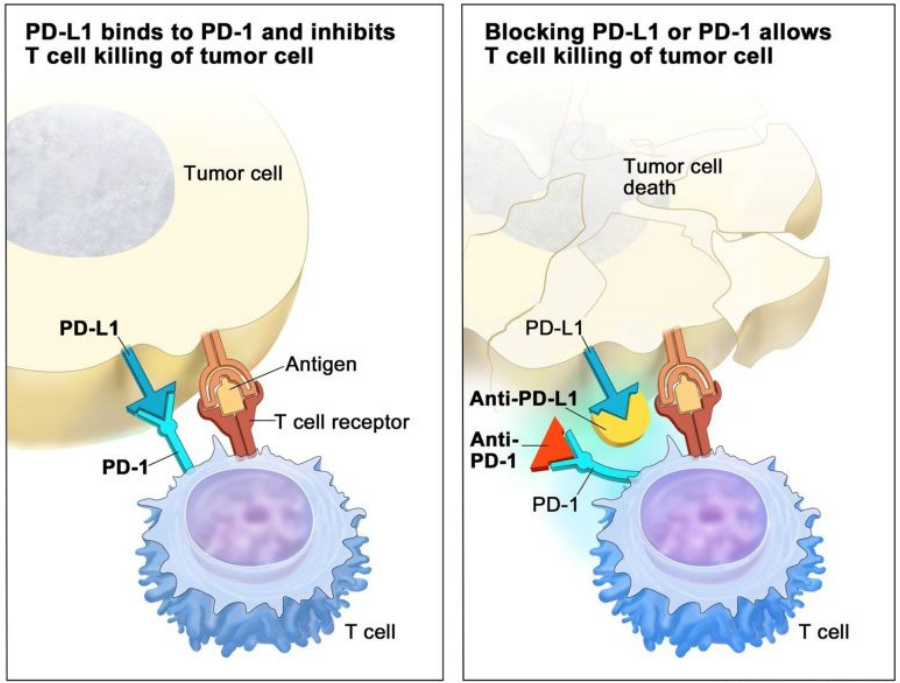
- Hydrocortisone 100mg iv bolus/50mg iv q6h

Medical Alert bracelet:

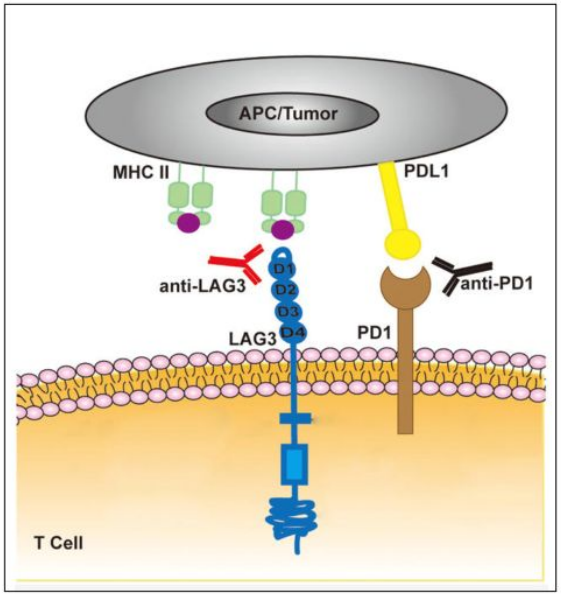
Adrenal Insufficiency:
needs steroids!

Bornstein 2016

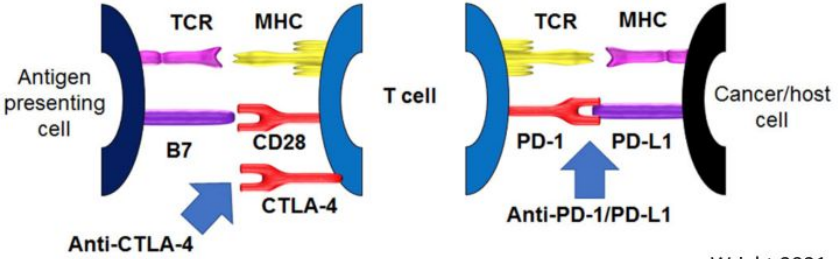
Immune checkpoint inhibitors



https://www.cancer.gov/about-cancer/treatment/types/immunotherapy/checkpoint-inhibitors

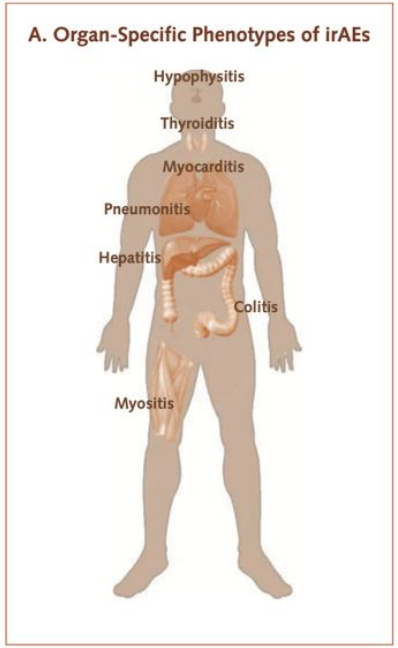


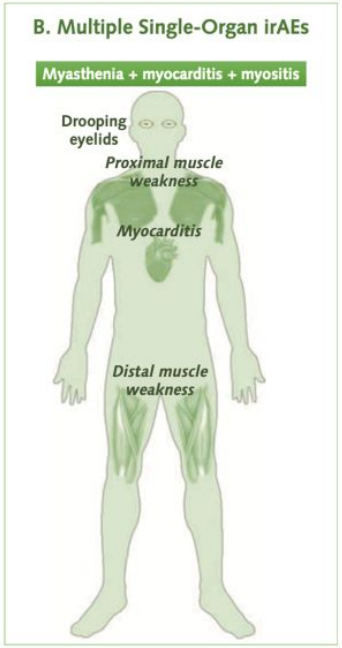
https://www.cancer.gov/news-events/cancer-currents-blog/2022/fda-opdualag-melanoma-lag-3

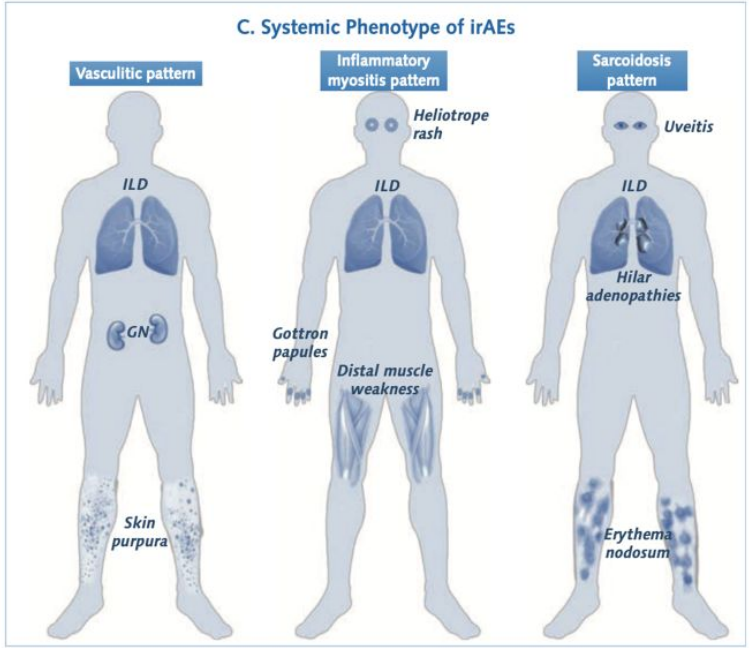


Wright 2021

Immune-related adverse events (irAEs)







Ramos-Casals 2024

Endocrine-specific irAEs

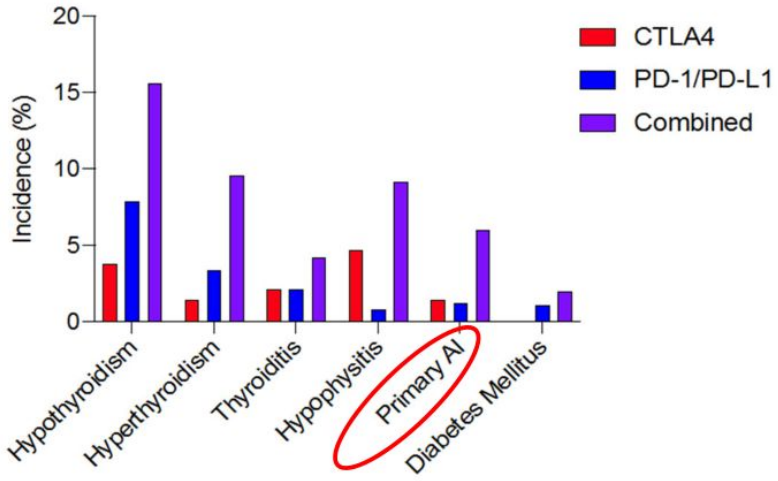


Figure 2:
Incidence of endocrine adverse events varies by organ affected and by type of ICI therapy. Data presented as percent of patients treated with indicated ICI therapy that develop the indicated hormonal dysfunction. AI, adrenal insufficiency. Adapted from data reported in de Filette et al, 2019.

Wright 2021

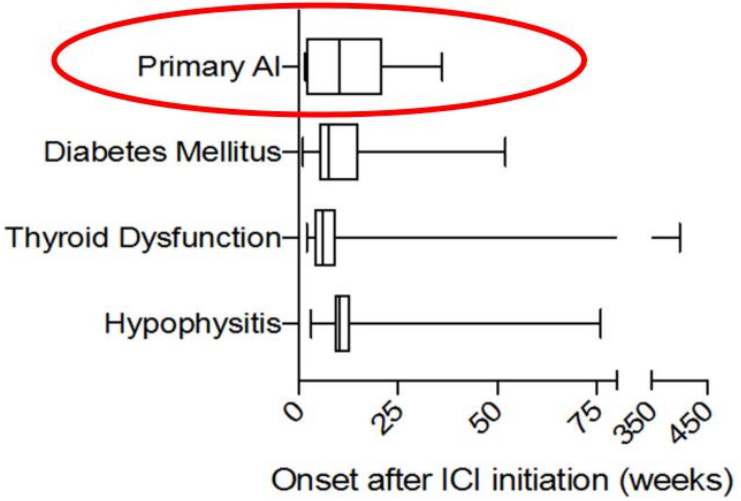


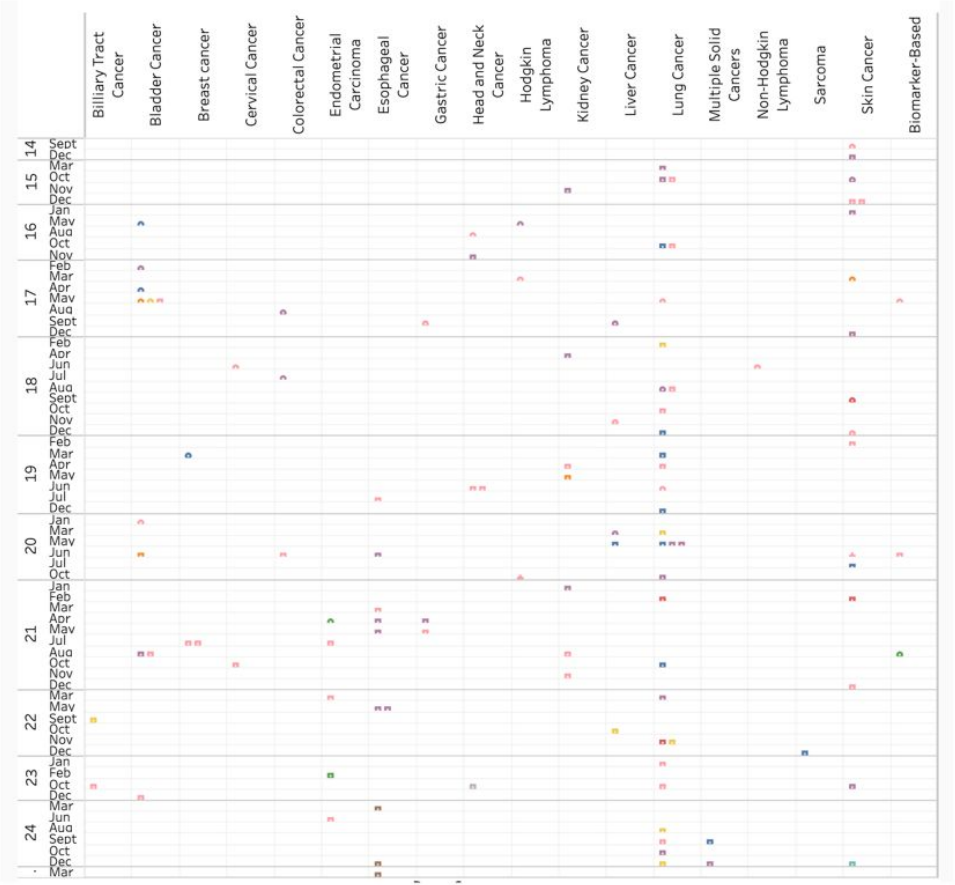
Figure 3:
Onset of endocrinopathy can occur at any time after ICI initiation. Median time (in weeks) to onset of AI, diabetes, thyroid dysfunction and hypophysitis, with interquartile range and range indicated by boxes and whiskers, respectively. AI, adrenal insufficiency. Adapted from data reported in Tan et al, 2019.

Wright 2021

Checkpoint inhibitors for melanoma

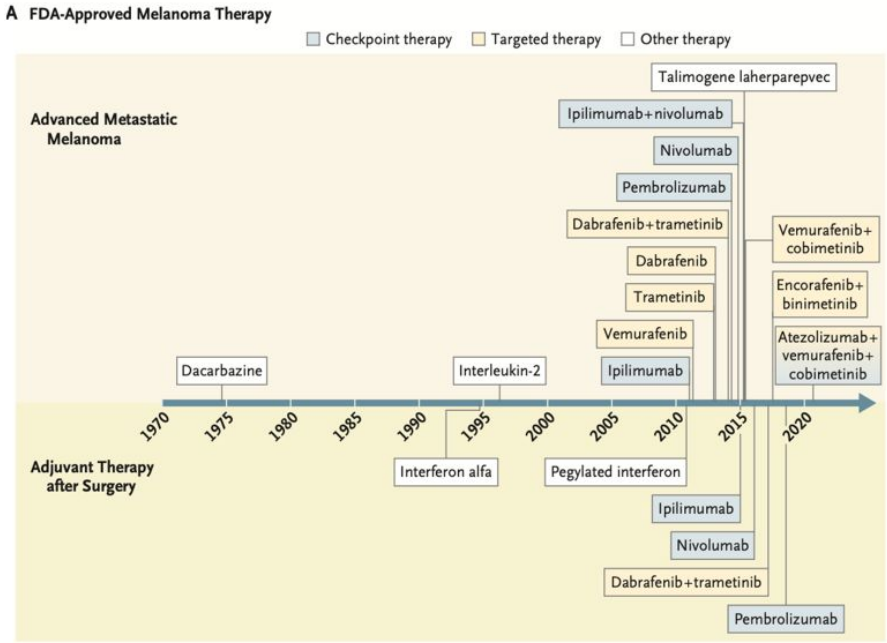
- PD-1 inhibitors
  - pembrolizumab (Keytruda)
  - nivolumab (Opdivo)
  - cemiplimab (Libtayo)
- PD-L1 inhibitors
  - atezolizumab (Tecentriq)
  - avelumab (Bavencio)
  - durvalumab (Imfinzi)
- CTLA-4 inhibitors
  - ipilimumab (Yervoy)
  - tremelimumab (Imjuno)
- LAG-3 inhibitors
  - relatlimab (+ nivolumab = Opdualag)

https://www.cancer.org/cancer/managing-cancer/treatment-types/immunotherapy/immune-checkpoint-inhibitors.html



https://www.cancerresearch.org/regulatory-approval-timeline-of-active-immunotherapies

The immunotherapy era in melanoma



Curti 2021

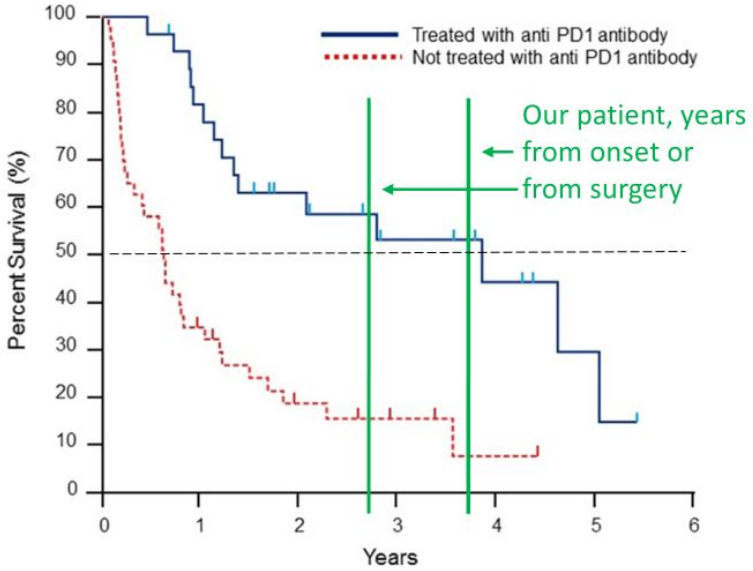
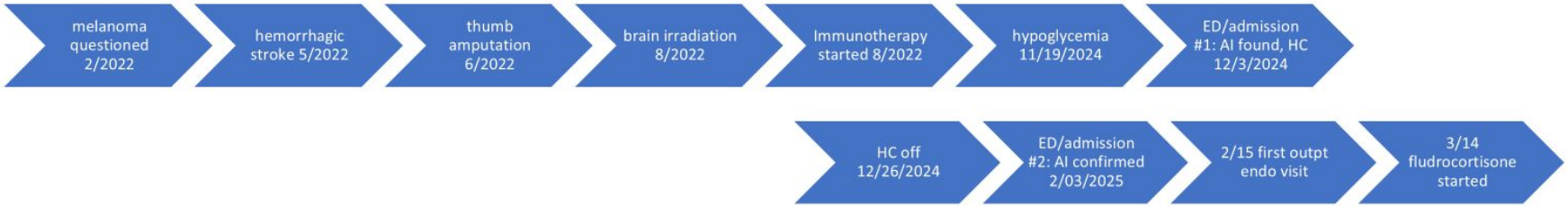


Fig. 2 Kaplan-Meier curves of overall survival by presence or absence of anti-PD-1 antibody therapy ***(pts with brain metastases)***

Vosoughi 2018

Discussion

- Our group's experience with adrenal insufficiency in PALTC
  - sick-day/stress dose management?
  - stable followup and dose titration?
  - adrenal crisis?
- Prevalence of checkpoint inhibitor therapy among our patients; our role in detecting/managing side effects
- Differentiating active vs historical, metastatic vs terminal cancer
  - when does it matter?
  - determining for oneself
  - communicating with others
- Systematic/facility-based strategies for care coordination in the face of systemic poor handoffs?



References and further reading

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- Wright JJ, Powers AC, Johnson DB. Endocrine toxicities of immune checkpoint inhibitors. *Nat Rev Endocrinol*. 2021;17(7):389-399. doi:10.1038/s41574-021-00484-3

Open Forum

Any questions or ideas from the talk?

Share an unidentifiable case to discuss

Do you have resources or professional meetings you could share in chat?

Indwelling Catheter Survey

A LTC-CN Network member is working on a new policy for indwelling catheters, and would appreciate feedback from other Network members. Please complete this brief survey. We will tabulate the data and share it with the group. Information shared like this will help improve quality of care in LTC. Thank you!

Survey Link

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Thank you for joining us!

Updates and News - See News Updates via email

Next Monthly Forum: **Wednesday, April 15th, 4-5 pm**

Your Calendar Link - In the Zoom Registration Confirmation email you received today, there's a calendar link to update your calendar for future meetings.

On your way out of our meeting today, kindly answer a brief feedback survey.

Stay in touch! Email us at vcoa@vcu.edu

Invite your colleagues! They can register at ltccn.vcu.edu