In the overwhelmingly rapid field of oncology: Does social media have a role?

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About Me



- Triple Specialized
 - Internal Medicine
 - Hematology & Medical Oncology (2 v 3 years)
- Serendipitously on social media
 - None before never thought of 'other job'
 - Age of ownership & self advocacy
 - Suboptimal healthcare system
- Pan-LSU—The White House
- Target: Cancer Podcast; Washington Post, ACS, LLS, Survivor Keynote
- Startups to improve access
 - Networking

Disclosure of Conflicts of Interest

Sanjay Juneja, M.D., has the following financial relationships to disclose:

- Consultant BMS, DSI, Guardant360, Phenomune, Signatera, Tempus, Xcures
- Speaker AstraZeneca, Merck, Signatera, Tempus

The 'Good' Problem

- Cancer therapies are coming out like crazy. Targeted and precision therapies, shuffling of lines of indication
- Its not just cancer therapies
 - Testing for therapies now matter hugely
 - □ New tests: HRD (homologous recombinant DNA) testing in ovarian cancer
 - □ Distantly tested things: HER2 1+ positive
 - ☐ Previously was negative, now positive
 - □ Carries TNBC (triple negative) or Her2(-) in notes for years
 - ☐ Circulating tumor DNA
 - 2 weeks for actionable mutations in lung cancer
 - □ Vs. 3 weeks for soft tissue





















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≫ Author Affiliations | Article Information

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Key Points

Question How many cancer therapies approved by the US Food and Drug Administration between 2016 and 2021 displaced standard-of-care therapies vs being added to existing therapies in the metastatic, adjuvant, and maintenance settings?

Findings In this cross-sectional study, between May 1, 2016, and May 31, 2021, there were 207 cancer drug approvals in oncology and malignant hematology. Of these

FDA approves sodium
 thiosulfate to reduce
 the risk of ototoxicity
 associated with
 cisplatin in pediatric
 patients with localized,
 non-metastatic solid
 tumors

On September 20, 2022, the Food and Drug Administration approved sodium thiosulfate (Pedmark, Fennec Pharmaceuticals Inc.) to reduce the risk of ototoxicity associated with cisplatin in pediatric patients 1 month and older with localized, non-metastatic solid tumors.

FDA approves
 durvalumab for locally
 advanced or
 metastatic biliary tract
 cancer

On September 2, 2022, the Food and Drug Administration approved durvalumab (Imfinzi, AstraZeneca UK Limited) in combination with gemcitabine and cisplatin for adult patients with locally advanced or metastatic biliary tract cancer (BTC).

FDA approves
pemigatinib for
relapsed or refractory
myeloid/lymphoid
neoplasms with FGFR1
rearrangement

On August 26, 2022, the Food and Drug Administration approved pemigatinib (Pemazyre, Incyte Corporation) for adults with relapsed or refractory myeloid/lymphoid neoplasms (MLNs) with fibroblast growth factor receptor 1 (FGFR1) rearrangement.

FDA approves ibrutinib for pediatric patients with chronic graft versus host disease, including a new oral suspension

On August 24, 2022, the Food and Drug Administration approved ibrutinib (Imbruvica, Pharmacyclics LLC) for pediatric patients ≥ 1 year of age with chronic graft versus host disease (cGVHD) after failure of 1 or more lines of systemic therapy. Formulations include capsules, tablets, and oral suspension.

FDA grants
 accelerated approval
 to fam-trastuzumab

On August 11, 2022, the Food Drug Administration granted accelerated approval to fam-



And the 'Bad'

- Litany of data showing sub-optimal and sub-standard care as these things rapidly update
- □ Up to 10-15% of Latinos and African Americans don't get tissue sequenced when appropriated in stage IV setting
- CT Lung cancer screening
 - 25% improvement in survival
 - □ 1:4 will live rather than die
 - Ordered when appropriate / Qualifies?
 - □ 6-8% success rate
 - □ Compare to ~70% for mammograms, 52% for colonoscopies
 - □ Came out in 2012!

Example 1:

Her2+ Therapy in FISH 1+ Stage IV BC

- ☐ FISH 1+ was always negative for 30+ years for Her2
- Summer of 2022—suddenly Enhertu—effective up to 85% of the time—works in 'low expression Her2' disease
- For triple negatives, almost all chemo
 - Multiple lines of chemo in 3rd and 4th setting
 - Exception sacituzumab Trop2 present in 90%
- What percentage of patient being told no more options or getting high toxicity from 4th line chemo are being checked back to see if in fact, "still" Her2 negative?
 - □ Up to 40-50% are "low-expression" positive
- Importance of re-biopsy too, here and all cancer types



Example 2: KRAS & Her2+ Stage IV Lung Cancer

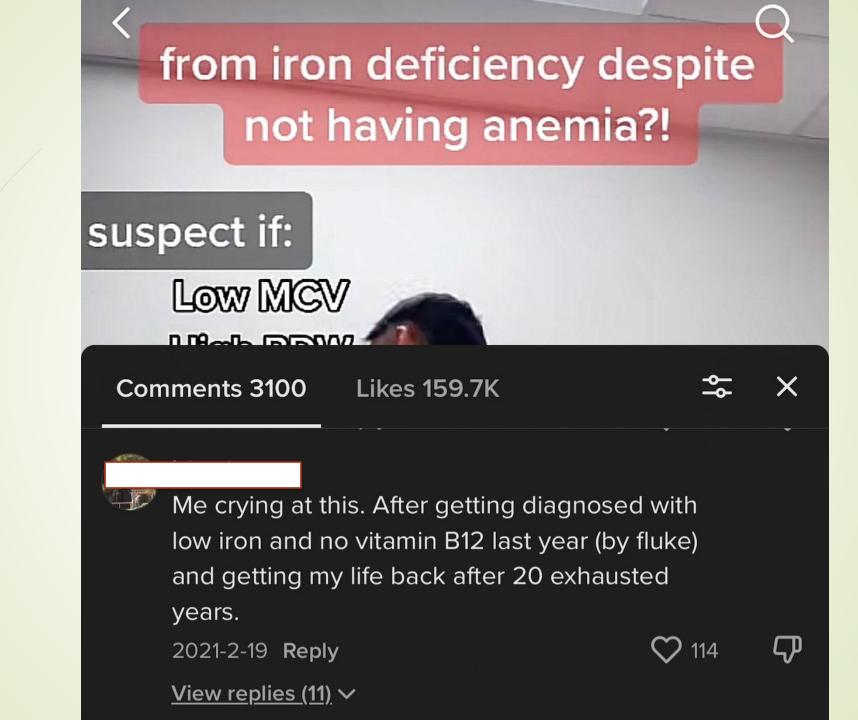
- Summer / Fall 2022: suddenly Her2+ is a targetable treatment for stage IV lung cancer
 - Only 12-18 months prior, KRAS was added
 - Previously in all textbooks / med schools as inactionable
 - Are stage IV lungs going back to check and see if now relevant?
- "Undetermined" significance Neogenomics, Guardant, Tempus
- **20-25% positive** for KRAS
 - 6-20% of lung cancers for Her2
- 576,000 / half a million people with lung cancer in 2019
 - □ 15-40% not tested 86,400 to 190,000 lives
 - At least half would respond to one of these therapies



Example 3: Iron deficiency +/- anemia

- Iron deficiency is never. normal.
 - Only two reasons to get deficient:
 - Stop absorbing
 - ☐ Radical diet, celiac disease, Gl surgery
 - Lose it (we recycle it—hemochromatosis otherwise)
 - □ Bleeding. GU GI or...
 - Menstrual cycles
- Lab abnormalities:
 - □ Low MCV, high RDW, low RBC count, low MCHC
- Education—early colon cancer, gastric, renal, bladder, endometrial





Cancer Myths ...and busting

- Can't get cancer / need screening because of no family history
 - Very common
 - Only 10-15% are due to known inherited mutations / genetics
- No more ob-gyne post-menopause
- Supplements / Herbals / Diets / Alternative Measures
- Cannot get cancer if you're healthy
 - Most common reason / highest risk?
 - Age
- Cancer is not curable, delays the inevitable
- Doctors / hospitals / Pharma wants to make money
 - Share the struggles / frustrations from healthcare side
 - Prior auths, above and beyond successes, ?stories (=care)
- No coincidence treatments work great and then... stop working

Validate their concerns

- Must maintain humility in both oncology, and in medicine
 - ☐ Theory vs Evidence
 - Diet and cancer, chemo brain, THC, antibiotics (gastric MALT lymphoma)
- Cardiotoxicity and cancer therapies
 - Trastuzumab, ibrutinib, doxorubicin, immunotherapy
 - Right sided heart failure: generalized fatigue, low energy, shortness of breath with normal chest xray and O2 saturations
 - European Society of Cardiology (ESC) on cardio-oncology
 - https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/Cardio-oncology-guidelines
- Paclitaxel pan-neuropathy
 - □ Not just sensory, but **autonomic** (hot flashes etc), and **motor**

The Future, but Not Really

- Travera tests chemo treatment effectiveness just like blood cultures
 - Density changes against control group
- Injectable tumors for neoantigens / abscopal effect
- Clinical trials = more data = more effective treatments
 - Many are just to expand to other tumors
 - CAR-T, compassionate use bill in Louisiana
 - Guinea Pig' partly true
- Solution? Educate
 - Explain from ground up, so perpetuated / inertial misconceptions get replaced
 - Build community, both medically and between medical and non
 - Many people trust nurses more than doctors

Comments





Because I know you're too popular to see my DM: I just moved to a new city and made a new climbing friend. She followed me on IG and then immediately texted me asking how do I know you. I told her I went to med school with you. She said that your account helped her this past year when she had triple negative breast cancer at age 24. You brought some light and clarity into her life to help her with her journey, and now I'm proud to call her a friend. So keep it up Thanks for doing what you do!

 \Diamond

1d 1 like Reply Send

Thank you!





References

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 Racial / Ethnic disparities in sequencing
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CDC.gov on screening statistics (slide 6 – mammogram, colonoscopy and CT lung cancer)

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