ImaginAb

A Message from the CEO

Welcome to the first edition of ImaginAb's See The Bigger Picture monthly newsletter, which keeps you up to speed on the latest developments within the Tr'I'fecta: Immuno oncology (IO), imaging, and ImaginAb. The purpose of this newsletter is to "See The Bigger Picture" by relating recent news in IO with ImmunoPET imaging, and act as a gateway to other articles in our Knowledge Hub.

In this newsletter, we will seek to bring the news of the industry to you, along with the latest news about ImaginAb. Each edition is only accessible on our free, online Knowledge Hub. At ImaginAb, it is our mission to challenge, create, and transform the future of immune oncology patient care path.

What's in this edition:

Main Feature: Why is PET Imaging important in Oncology?

Advancements in IO
- Article: "Tissues, not blood, is where immune cells act"
- Article: "A reengineered common chain cytokine augments CD8+ T cell–dependent immunotherapy"

Advancements in ImaginAb
- Register for the Knowledge Hub, new content and platform updates coming soon...
- SNMMI Breakfast Symposium video recording on Ph I & Ph IIa data Available Now
- ImaginAb GM, Europe Gareth Smith attends BIRC

Upcoming Events
- Meet our team in Paris for ESMO 2022

Why is PET Imaging Important in Oncology?

Understanding Positron emission tomography (PET) imaging and its applications allows us to see the bigger picture in immunotherapy clinical trials. In the expanding field of immuno-oncology (IO), there is a growing need for earlier and more accurate in vivo molecular markers that can measure immune responses to an increasing number of IO therapies (IOT).

^{18}F Fluorodeoxyglucose
FDG PET

PET is a well-established non-invasive imaging technique that has the sensitivity to detect changes in biological processes at the molecular level and has expanded to include ImmunoPET, which employs antibody-based radiotracers to image tumors, based on expression of tumor-associated markers, or associated cells, based on immune or other tissue-based markers [1–3]. PET tracers contain positron-emitting radionuclides that can be incorporated into a variety of molecular targeting compounds (e.g., small molecules, peptides, antibodies, nanoparticles).

PET imaging is a quantifiable and clinically translatable technique, most widely used in clinical oncology for detection of tumors and staging of disease [4]. PET tracers can be delivered at sub-pharmacological doses, and are biologically indistinguishable from their stable natural counterpart, allowing them to image with limited safety concerns and minimal disturbance of the biological system being monitored. PET imaging allows whole-body imaging, potentially directing biopsy, and identifying lesions that are either responding or not responding to therapy.

In the example images above, the FDG PET image [5] highlights metabolically active tissues taking up the radioactive glucose, e.g., brain and tumor (lower right leg), or tissues involved in glucose excretion (e.g., bladder). The CD8 PET image [5] highlights normal (e.g., spleen, bone marrow) and diseased tissue (e.g., tumor) where CD8+ cells accumulate.

^{89}Zr crefmirlimab berdoxam
CD8 PET

The ability to monitor CD8 positive tumor infiltrating lymphocytes (TILs) in vivo is important for evaluating response to immunotherapies and assisting in the development of more effective immune cell targeted single and combination therapies. The forementioned ImmunoPET imaging of tumor infiltrating T cells is designed to provide a specific and sensitive modality to determine in a clinical trial whether the therapy is working.

Current standard of care biopsies to assess T-cell infiltration have known limitations. They are invasive and subject to sampling error, both within a lesion and across the entire burden of disease. Thus, a noninvasive method of visualizing CD8+ T-cell whole-body trafficking and tumor infiltration, like CD8 ImmunoPET imaging, has the potential to play a pivotal role in enhancing clinical development of immunotherapy drug candidates.

Click Here to learn more about CD8 ImmunoPET.

Advancements in the World of Imaging

Here we've highlighted relevant IO news spotted by our team this month.
Contact us to recommend news to be featured in our next edition.

Tissues, not blood, are where immune cells act
This excerpt by Donna L. Farber highlights critical lessons for IO learned while studying Covid-19 patients.

Download the paper here.

"A reengineered common chain cytokine augments CD8+ T cell–dependent immunotherapy"
This article by Valo describes a novel entrant into the IL-2 common γ chain family of signaling moieties. OPL-0101 (referred to as OMCPmutIL 2 in the paper) will be exciting to follow in the clinic. CD8 ImmunoPET would be an ideal readout for efficacy of IL-2 receptor signaling molecules in human clinical trials.

Read the full article here.

"One of the greatest challenges is to follow an immune response to infection in specific tissues..."

Advancements in ImaginAb

Keep up to date on the latest news on our free, online **Knowledge Hub** - where you can view all our abstract presentations, webinars, publications, articles and more.

New Knowledge Hub Content, SNMMI Event Recording
"An Early Look at Immune Responses - How can zirconium Zr 89 crefmirlimab Advance Our Understanding?"

A video recording of our sponsored SNMMI Annual Meeting Breakfast Symposium held on June 12th is now available.
The talk included expert panel members who presented and discussed our Phase I & IIa data, and provided details on our its Phase IIb 'iPREDICT' trial, which is currently recruiting.

Pictured to the left is CEO Ian Wilson with Founder Anna Wu, who was recognized as a 2022 Fellow.

Upcoming News

Conference Attendance
Meet our team in Paris, September 9-13

Schedule a meeting

The People Behind ImaginAb

Gareth Smith attends **BIRC**

GM, Europe attended the Building Immune Radiotherapy Collaborations Conference in Cardiff this month - an event that focuses on the immune aspect of radiotherapy.
read more

We want to hear from You

Help us understand what is most important to you in your clinical trials or clinical development by taking our 1 question survey.

Complete the Survey

Let us know how we did - how did you rate this publication?
Please contact us at info@imaginab.com for comments and feedback on what content you would like to see next.

Thank you, and remember to share our See The Bigger Picture newsletter... next edition coming in August!

References

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