

Internal dosimetry in a new radioimmunotherapy - medicine you can see!

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Outline

1. A little tale of thyroid
2. What is targeted radionuclide therapy?
3. What is internal dosimetry and how is it done?
4. What do we do and what have we found out?

1. A little tale of thyroid



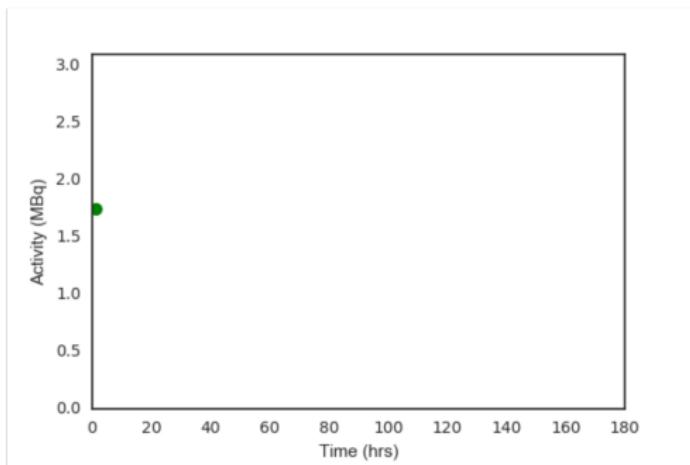
 Martin Finborud - Arkiv for Ringsaker, Hamar, Vang, Stange og Løten, Hedmarksmuseets fotoarkiv, HHB-00185

2. What is targeted radionuclide therapy?

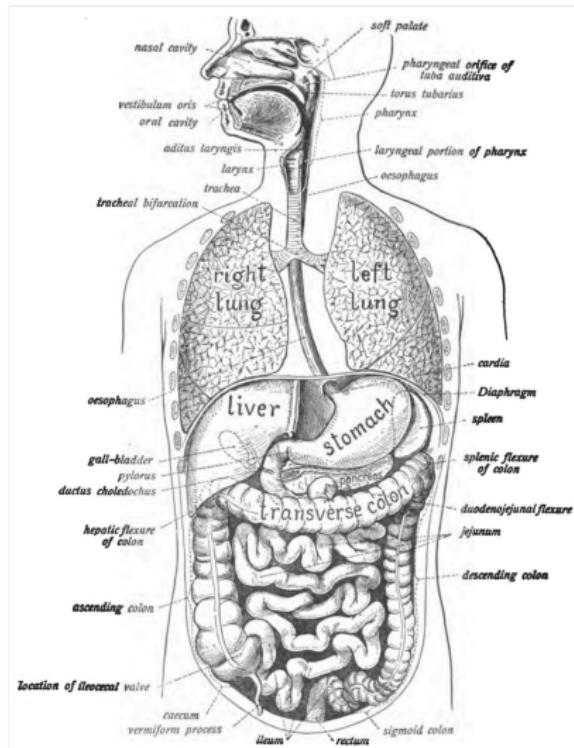


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Step 1 - Get the cumulative activity



Step 2 - Calculate the dose

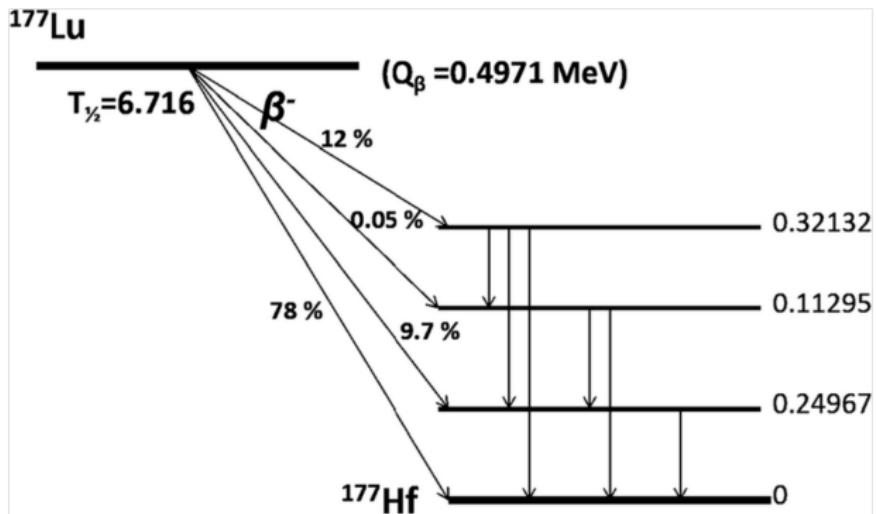


Or more mathematically...

$$\bar{D}_t = \frac{1}{m_t} \tilde{A}_s S(t \leftarrow s) \quad (1)$$

$$\bar{D}_t = \sum_s \frac{1}{m_t} \tilde{A}_s S(t \leftarrow s) \quad (2)$$

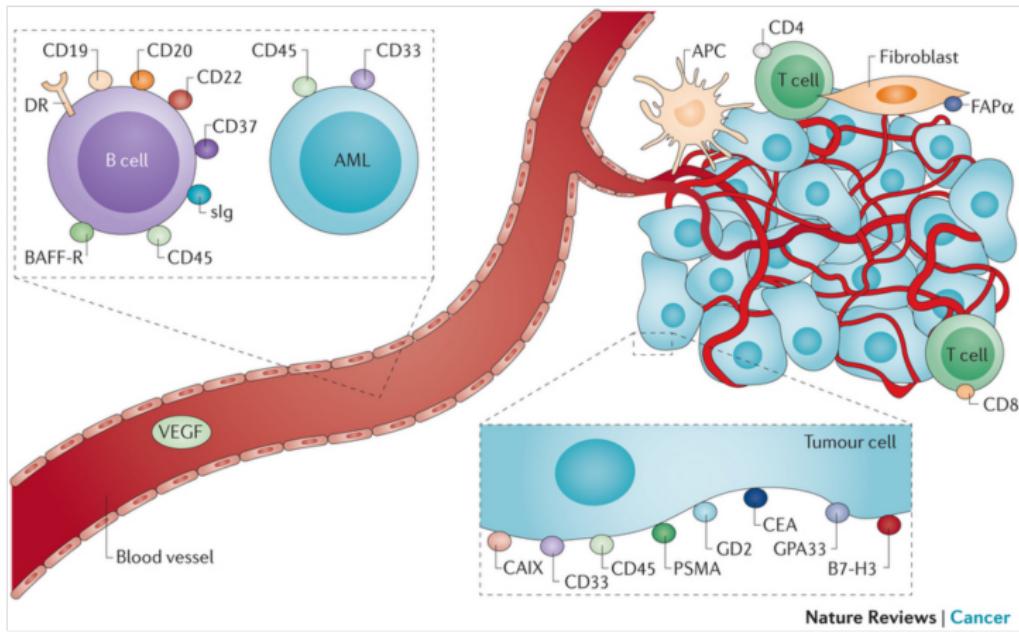
4. What do we do and what have we found out?



Production of ^{177}Lu for Targeted Radionuclide Therapy:
Available Options

Abhishek Desai ·
Marvin Raghavan Andikalanjan Pillai ·
Fiona F. Knapp Jr.

4. What do we do and what have we found out?



Nature Reviews | Cancer

Radioimmunotherapy of human tumours

Steven M. Larsen, Jorge A. Carreno-Palma, Nai-Kang V. Cheung & Oliver W. Press

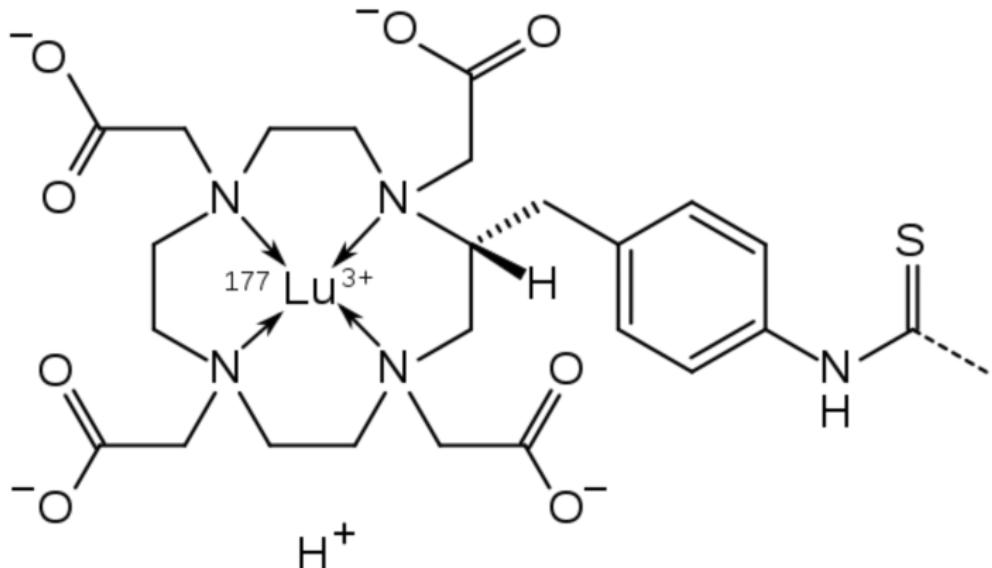
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Correspondence (August, 2015)

4. What do we do and what have we found out?



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