Nuclear medicine
A driving force
in the fight against cancer

Antonis Kalemis PhD, President Nuclear Medicine Europe
Nuclear Medicine diagnoses and treats 12 million patients per year in oncology 65% 8 million patients per year
Nuclear Medicine is effective in **Cancer Diagnosis**

Courtesy of Prof Serge Goldman, ULB / Easme Hospital
Nuclear Medicine is effective in Guiding Therapy

Example: A marketed Immunotherapy agent for a certain family of cancers used as 2\textsuperscript{nd} line treatment.

Extremely effective for patients with a certain genotype.

But it has also significant Side effects

“Does this therapy work?”

Baseline PET/CT scan

14 days later

Benz et al; J Nucl Med 2011
Nuclear Medicine as Cancer Therapy

PET/CT scans (Positron Emission Tomography) | Targeted radionuclide therapy

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PSA = 294 ng/ml</td>
<td>PSA = 419 ng/ml</td>
<td>PSA = 3.5 ng/ml</td>
<td>PSA ≤ 0.1 ng/ml</td>
</tr>
</tbody>
</table>

Identical pharmaceutical with different radionuclide

Kratochwil et al. JNM 2016 57*12) 1941-1944
Nuclear Medicine is **Diagnosis** and **Therapy**

- Early detection of cancer
- Better **choice of treatments**
- Effective and **safe** treatments
- No or very **minor** side effects
- Enhanced **quality of life** for patients

**Nuclear Medicine** is strongly contributing to develop **personalized medicine**
We represent the majority of radiopharmaceutical & imaging equipment companies in the field of Nuclear Medicine in Europe.