

INFN.Open

**IL TRASFERIMENTO TECNOLOGICO,
DALLA RICERCA ALL'INNOVAZIONE**



**Mercoledì
18 Settembre 2024
ore 10.00**

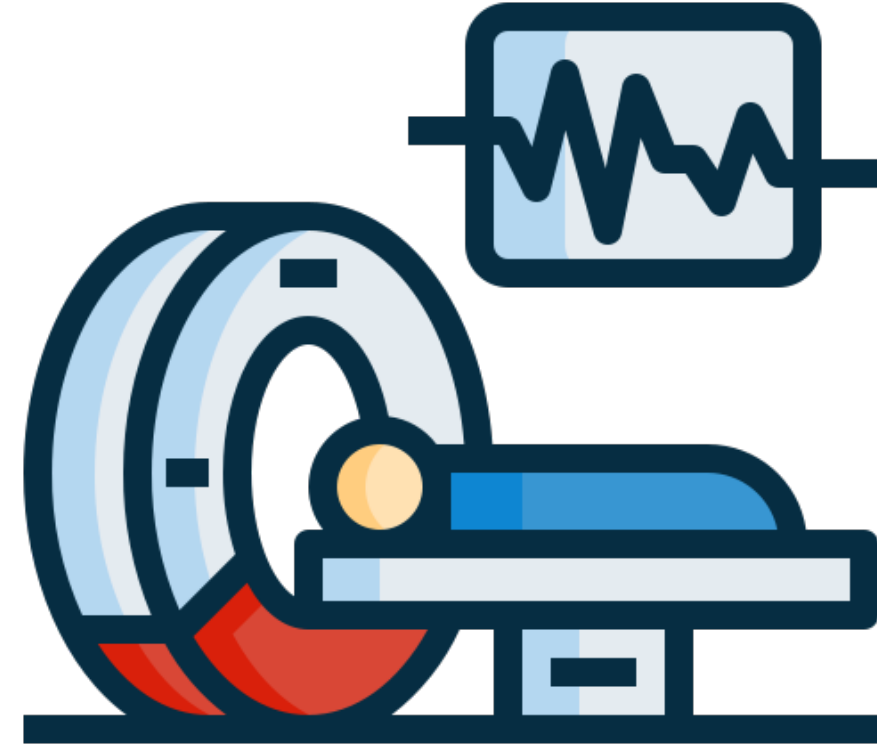
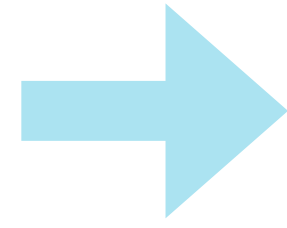
Palazzo Merulana
Via Merulana 121, Roma

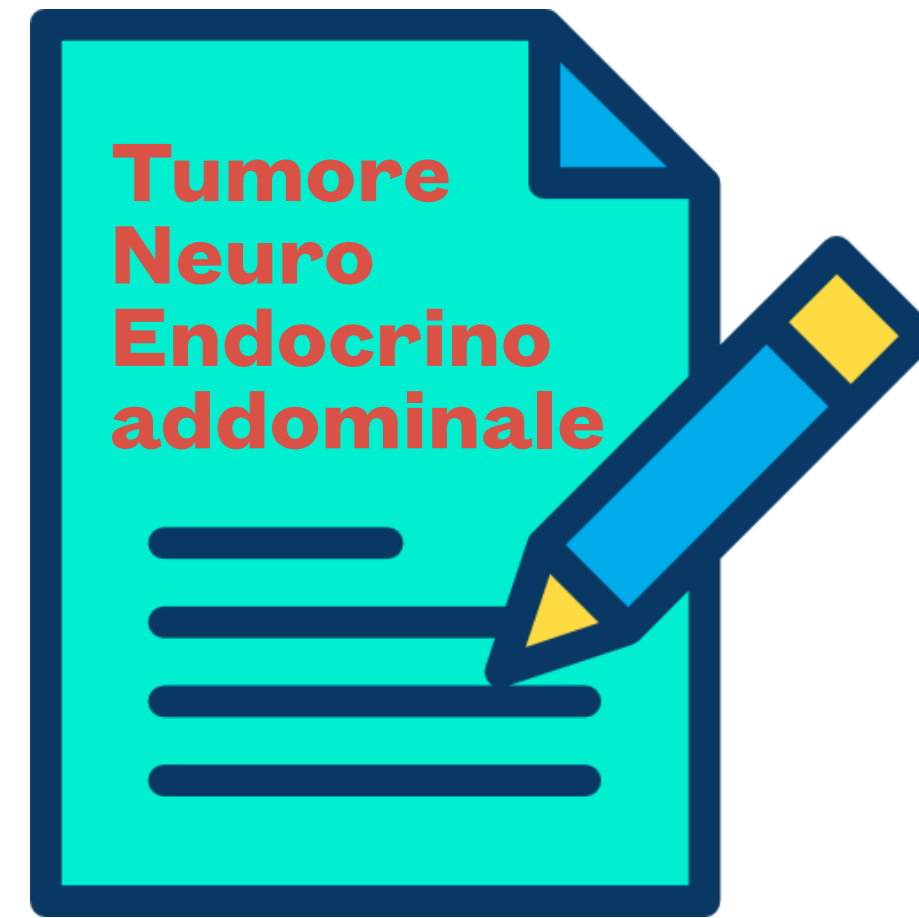
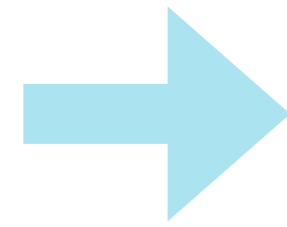
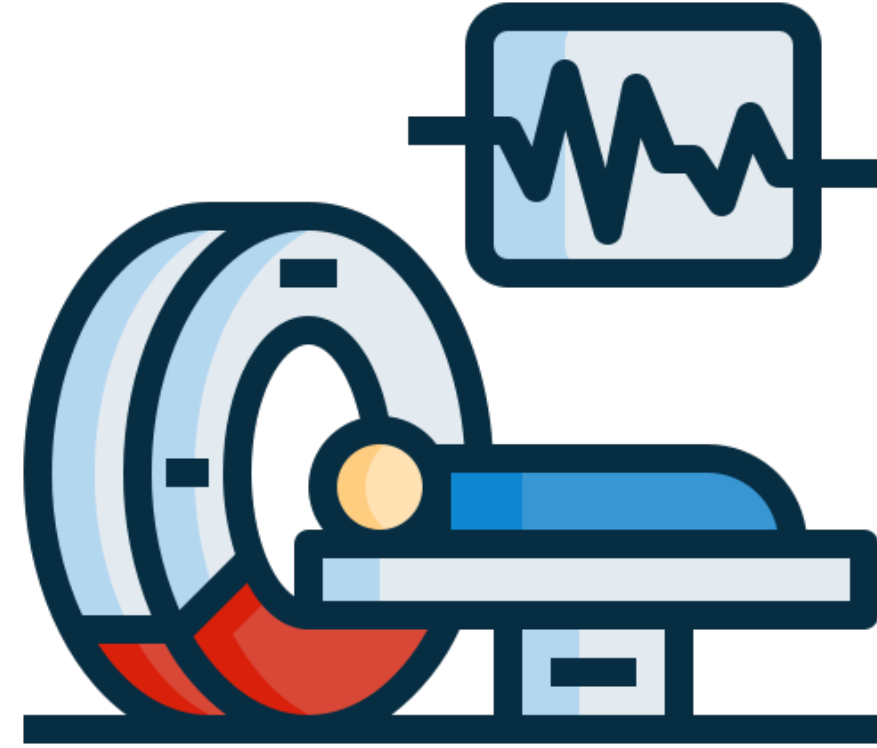
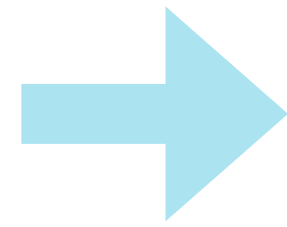
RADIANTIS

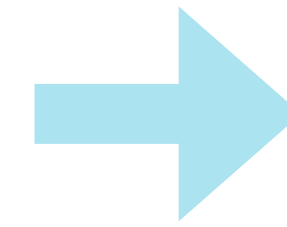
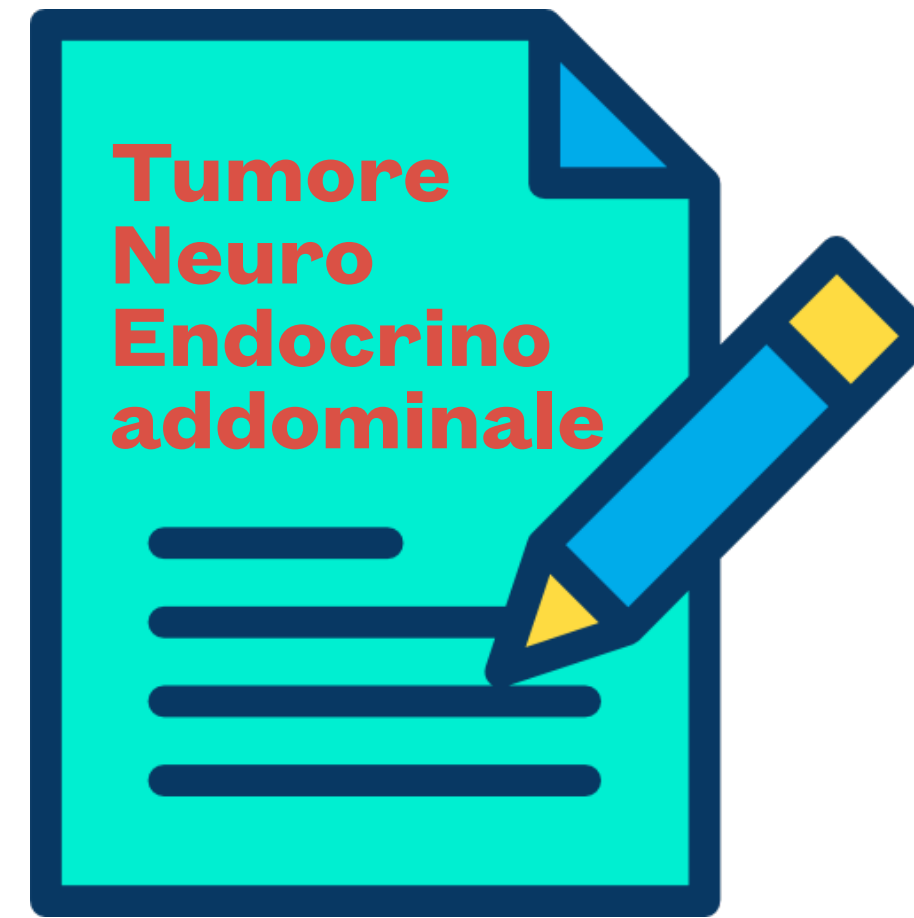
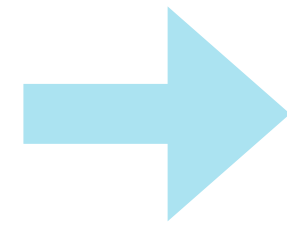
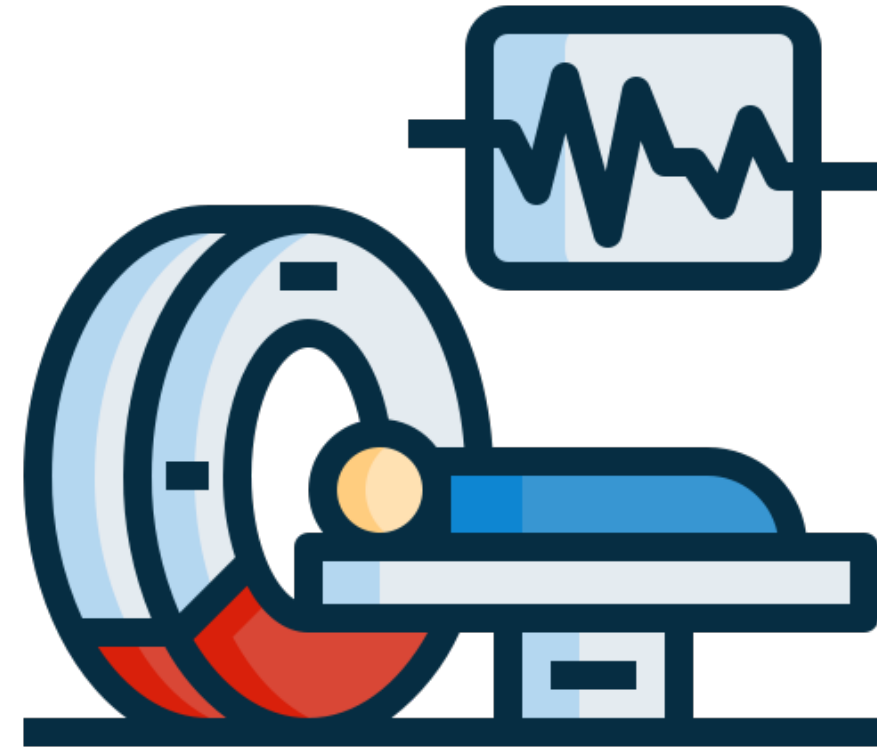
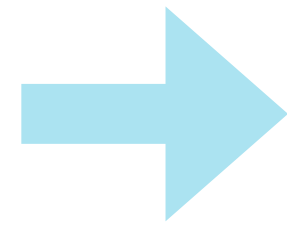
Chasing precision in oncology

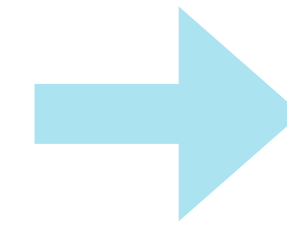
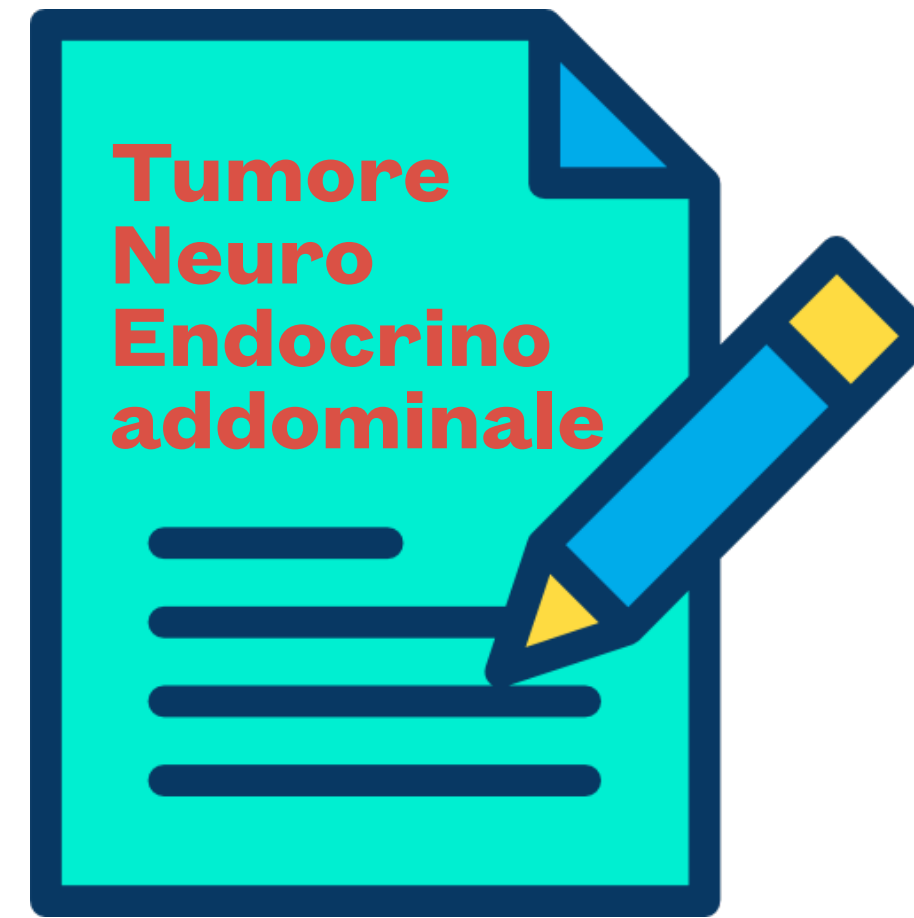
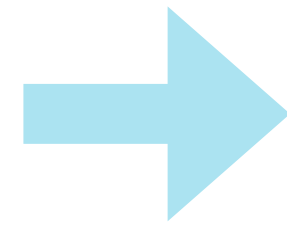
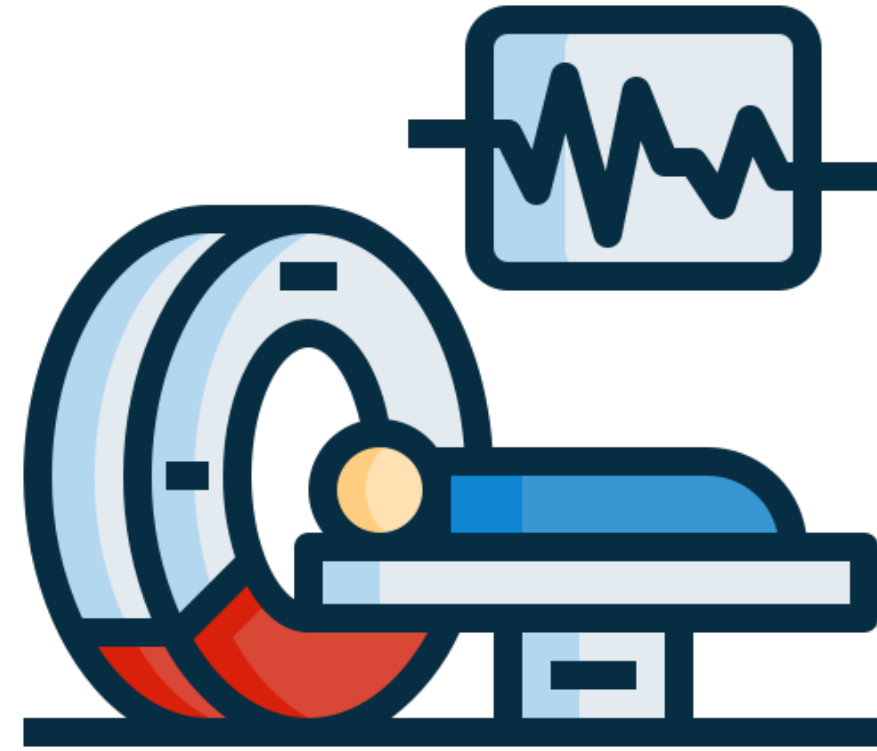
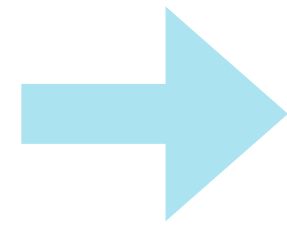
FRANCESCO COLLAMATI - INFN SEZIONE DI ROMA



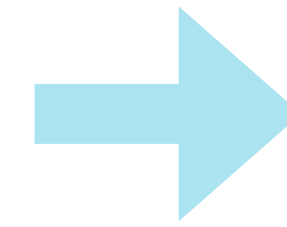
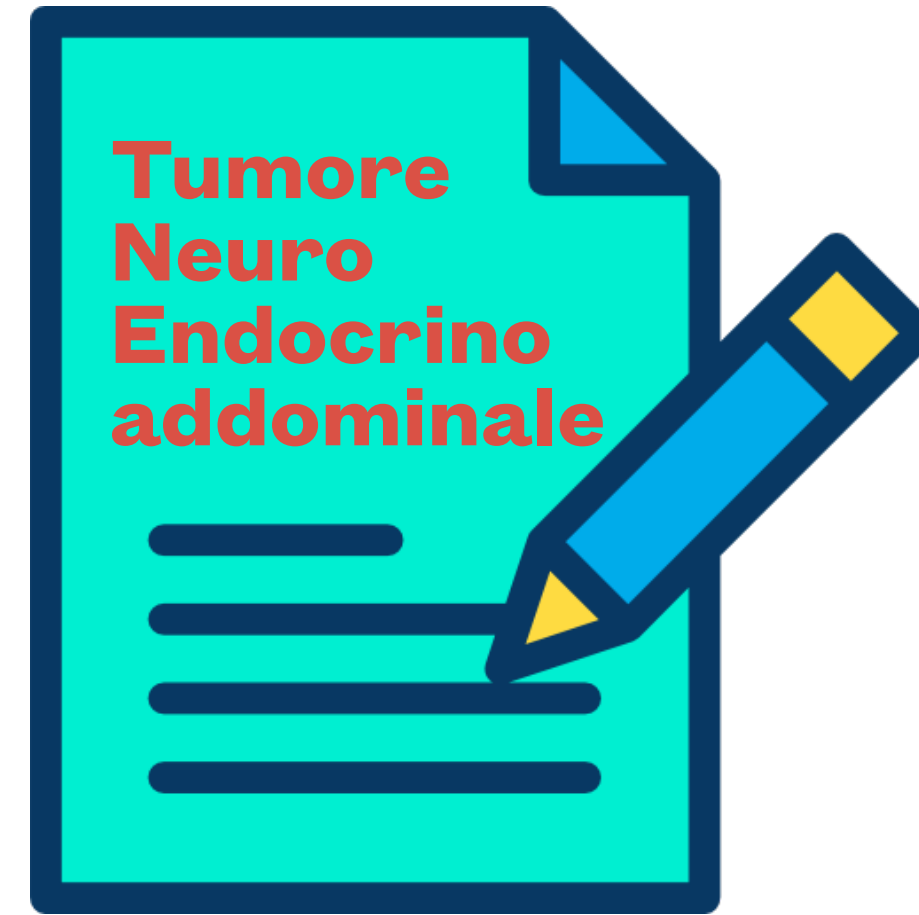
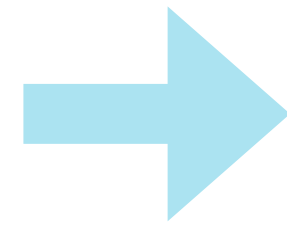
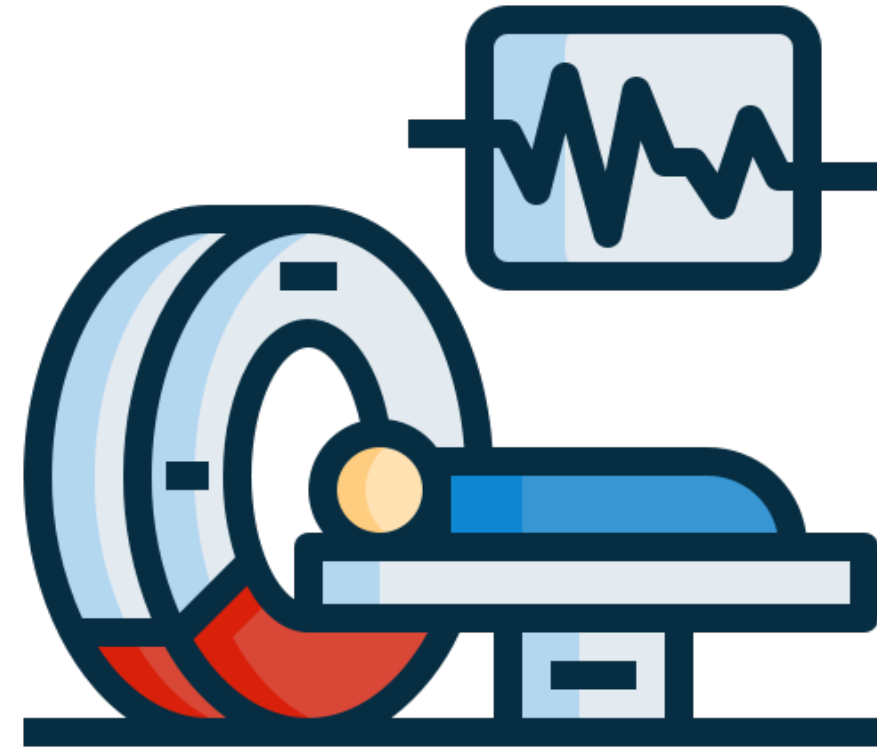
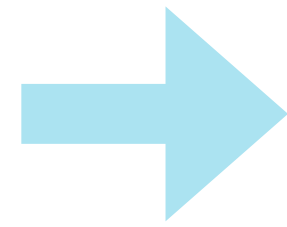




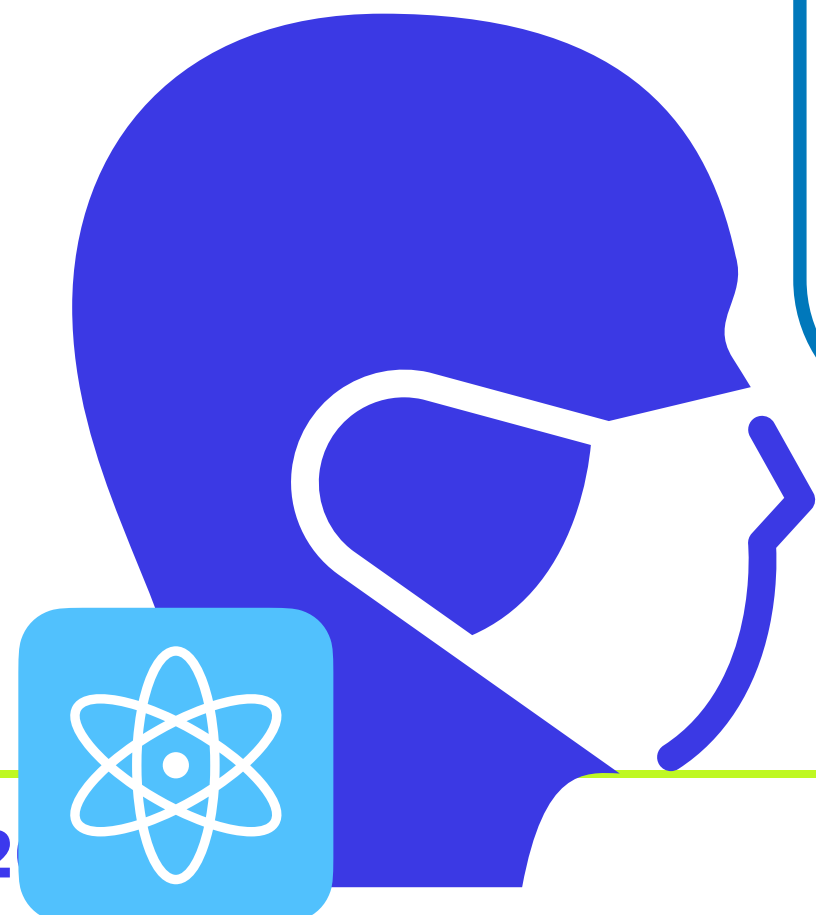


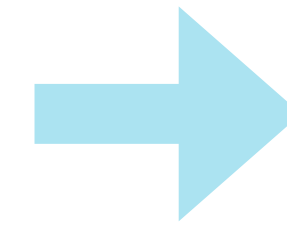
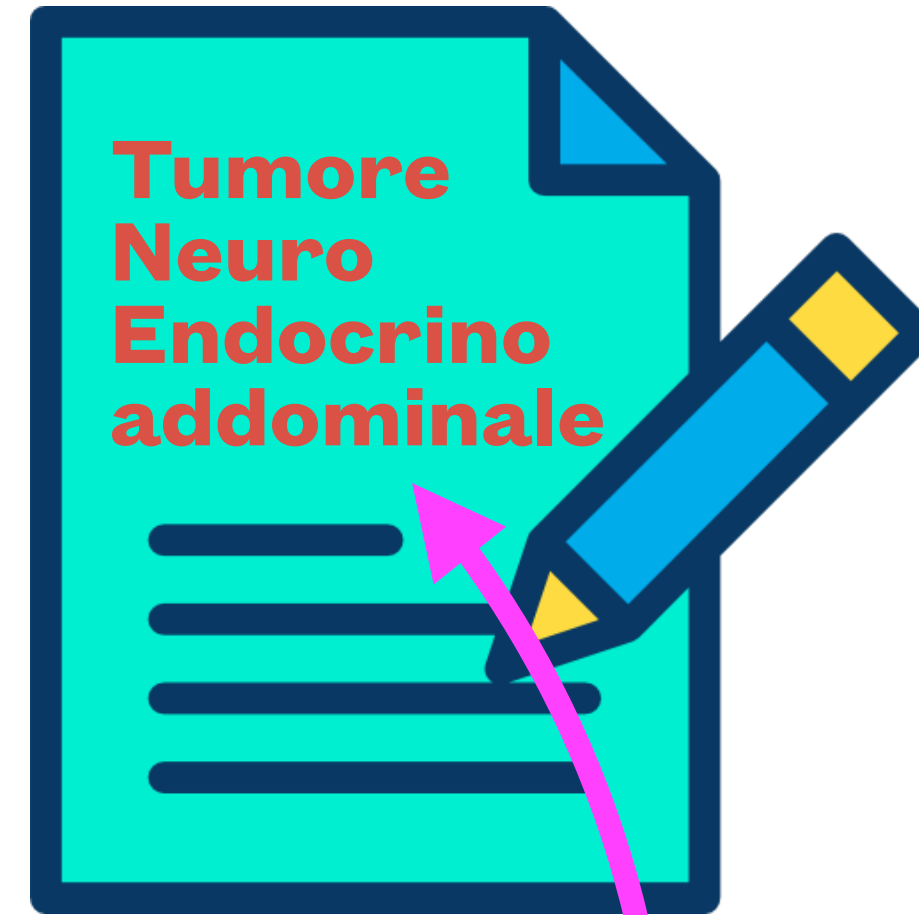
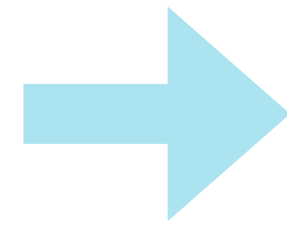
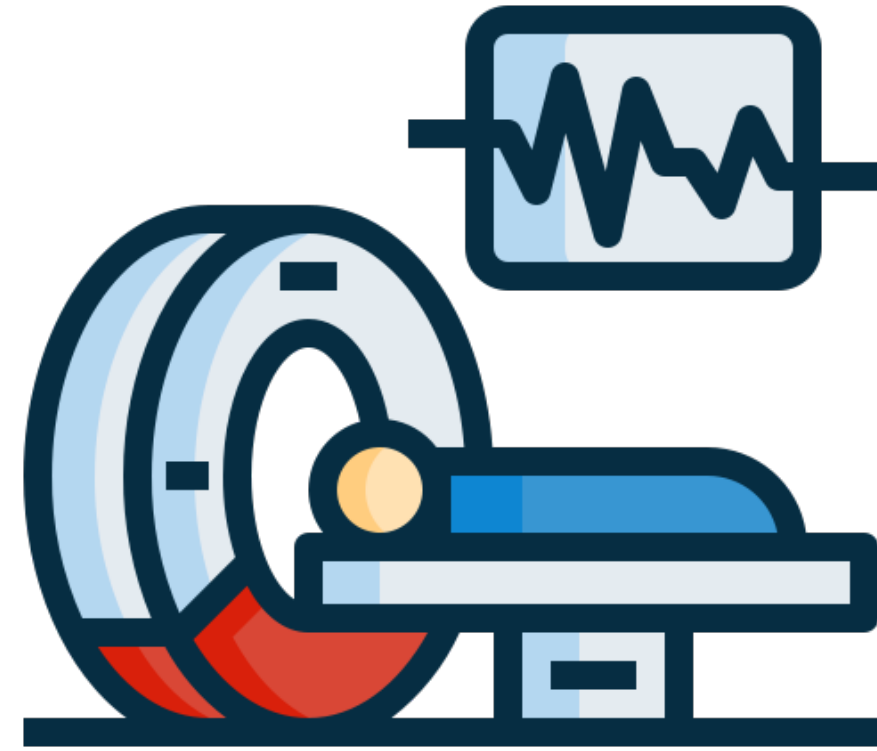
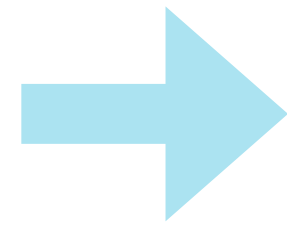


Come asportare **tutto** il tumore?

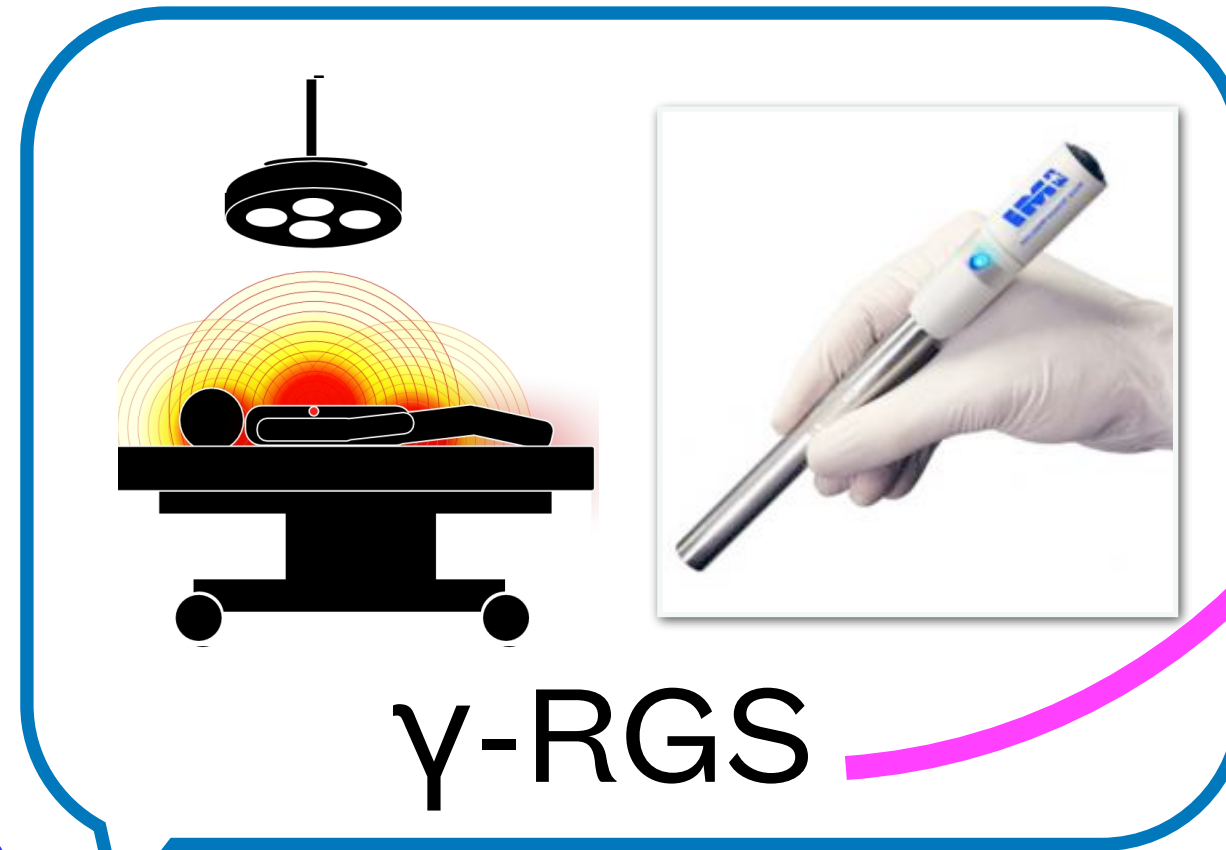
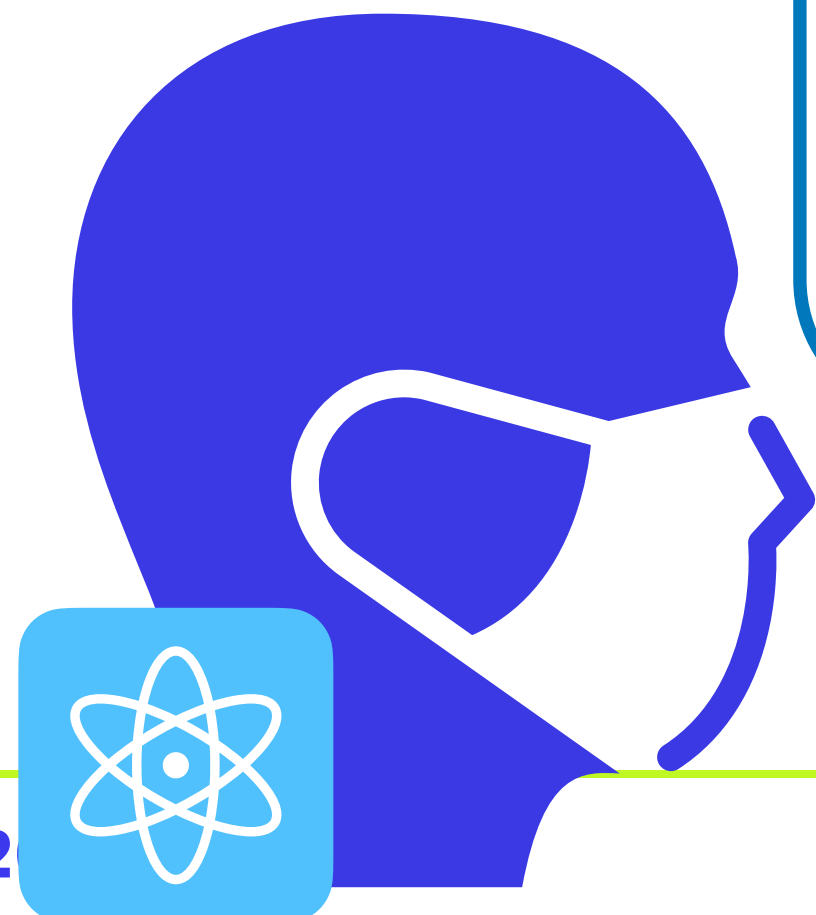


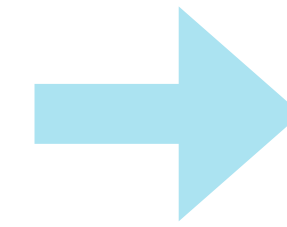
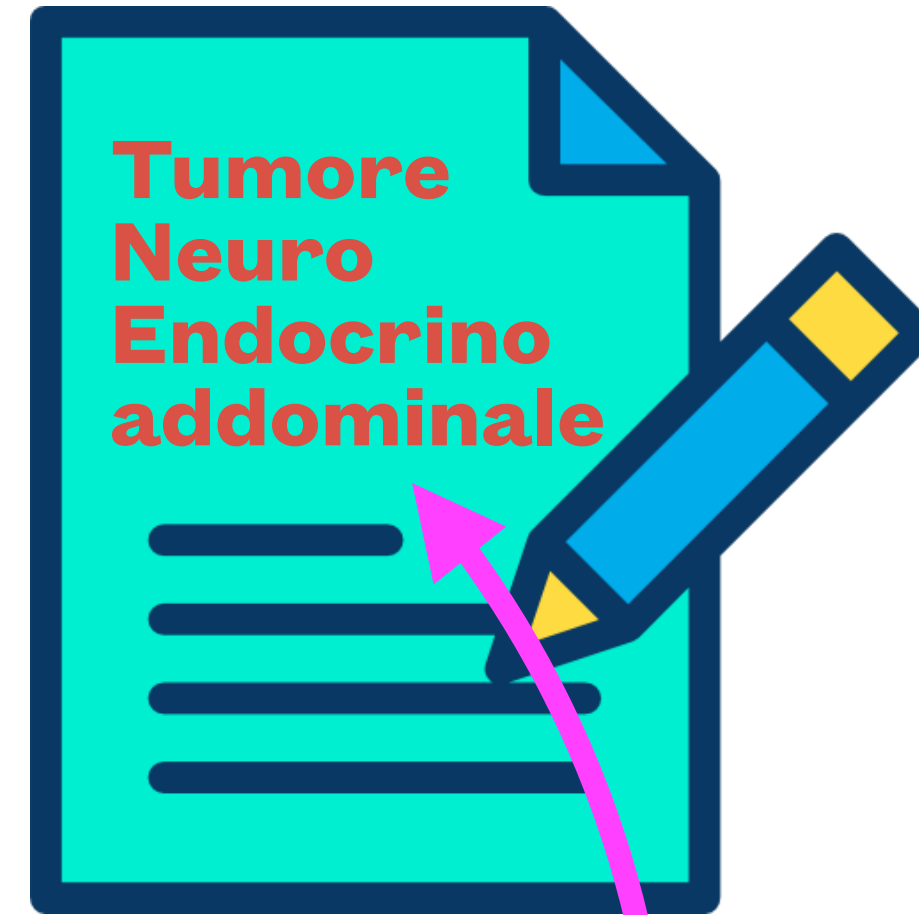
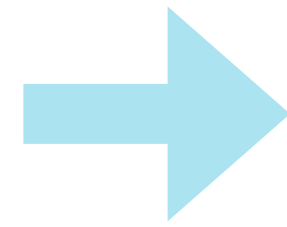
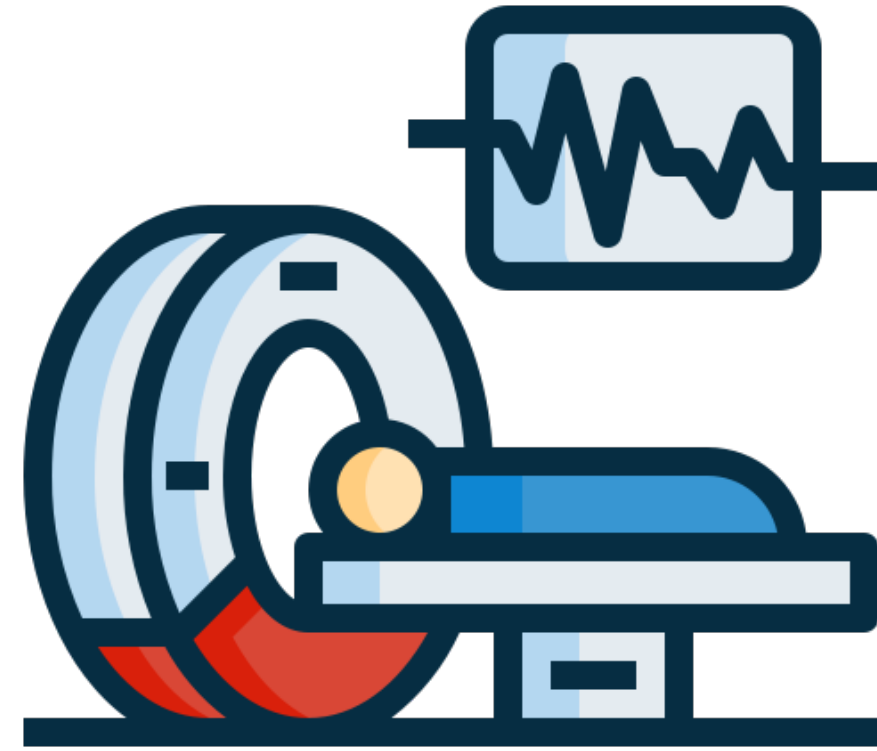
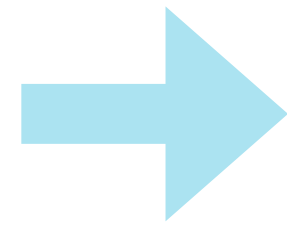
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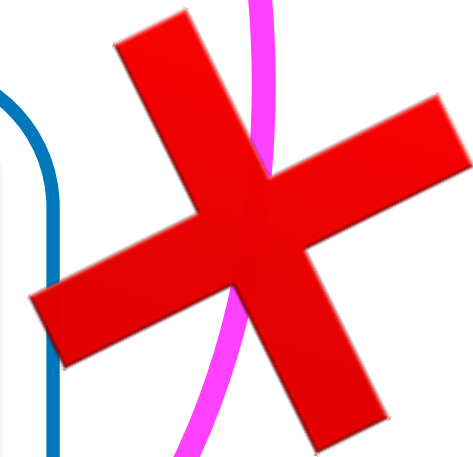
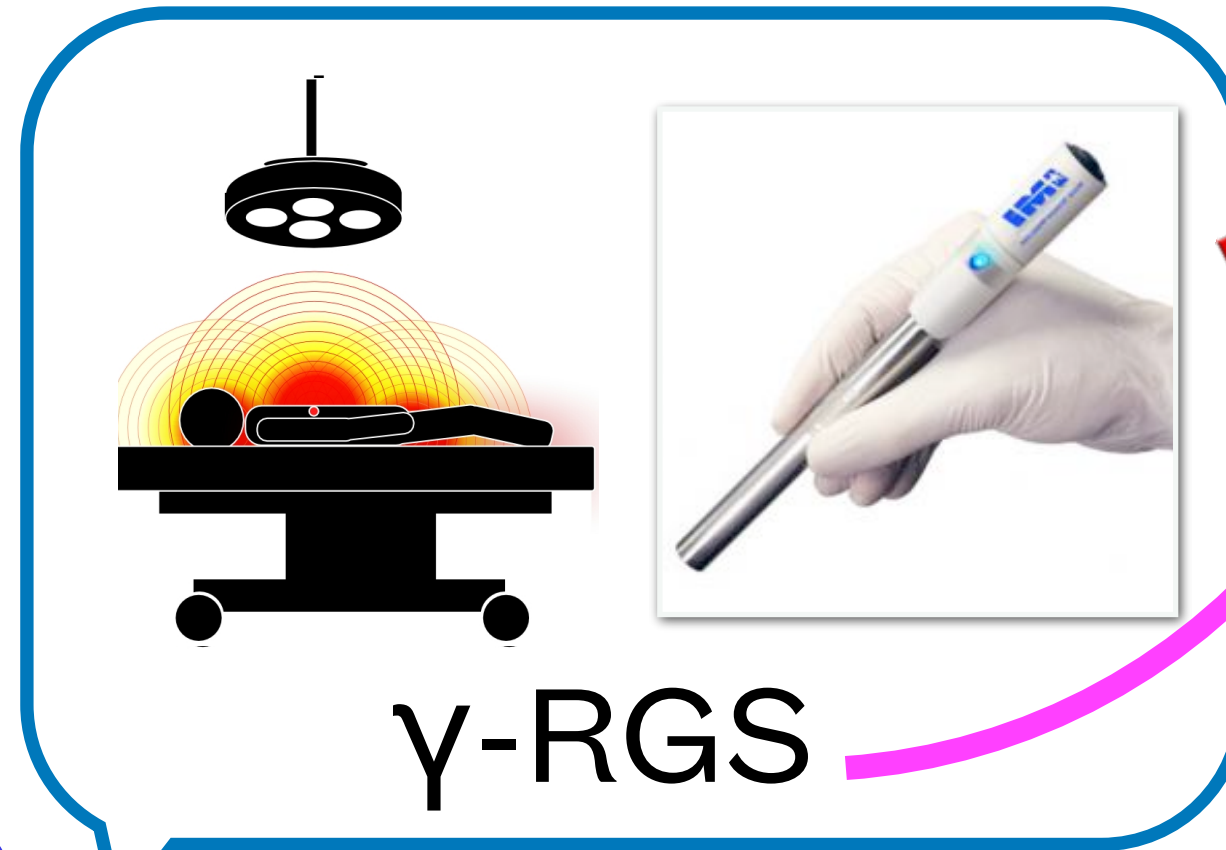
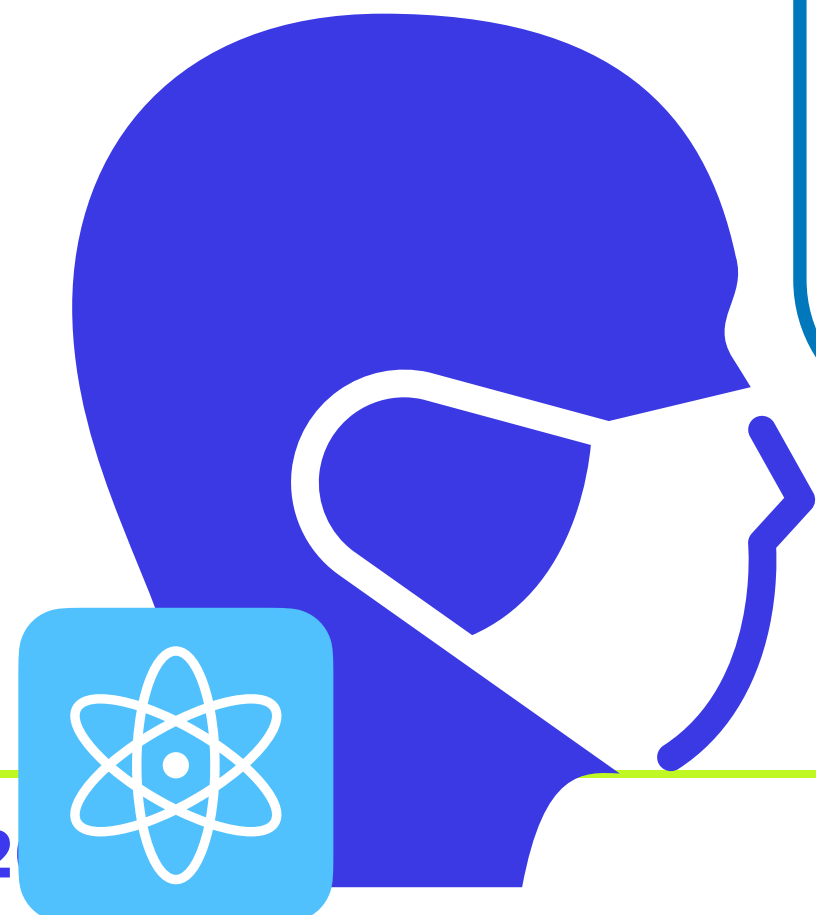


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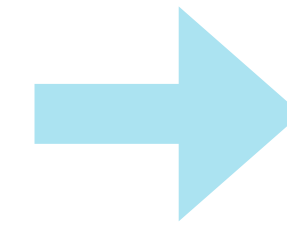
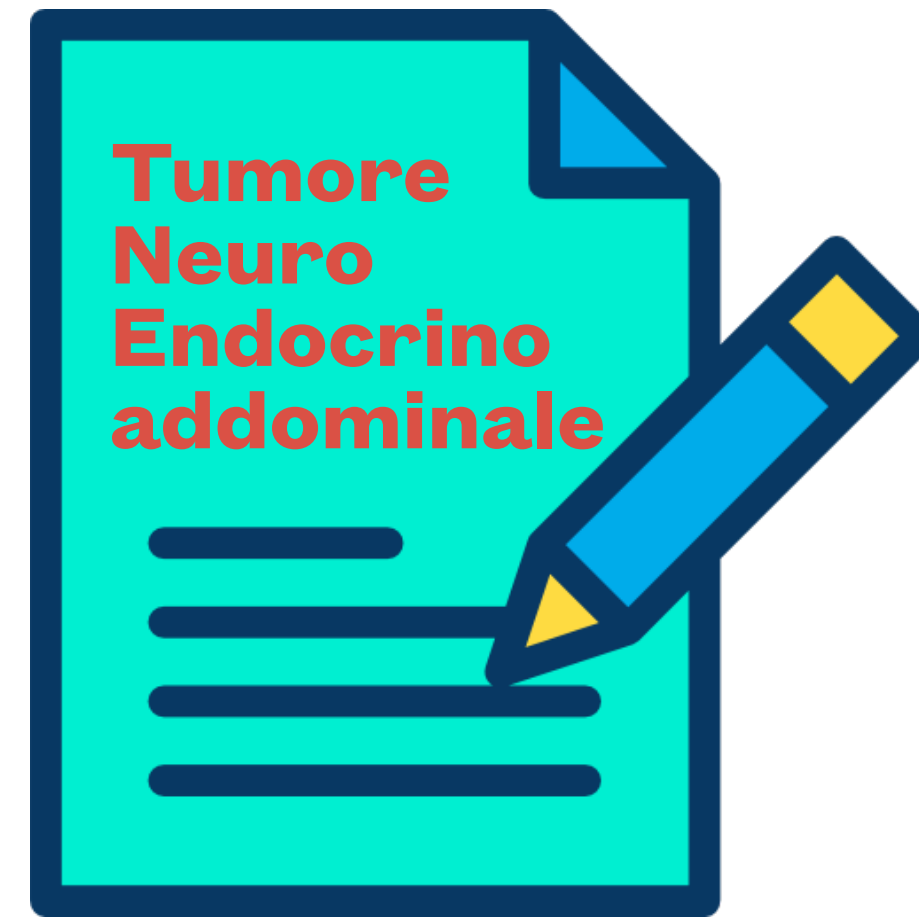
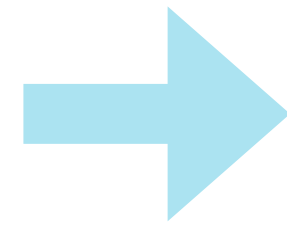
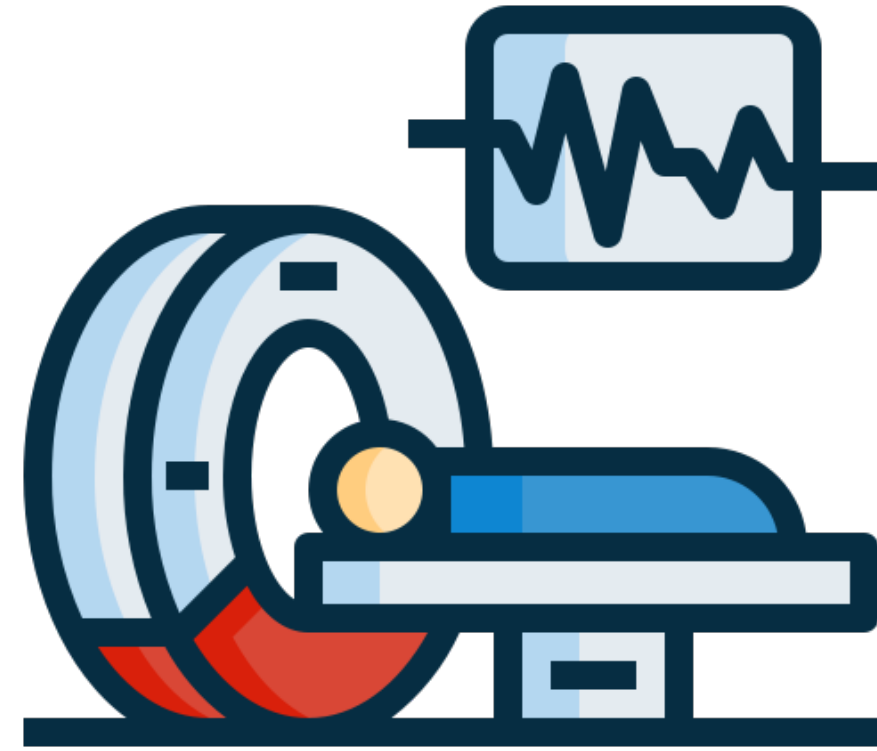
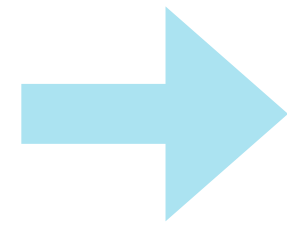




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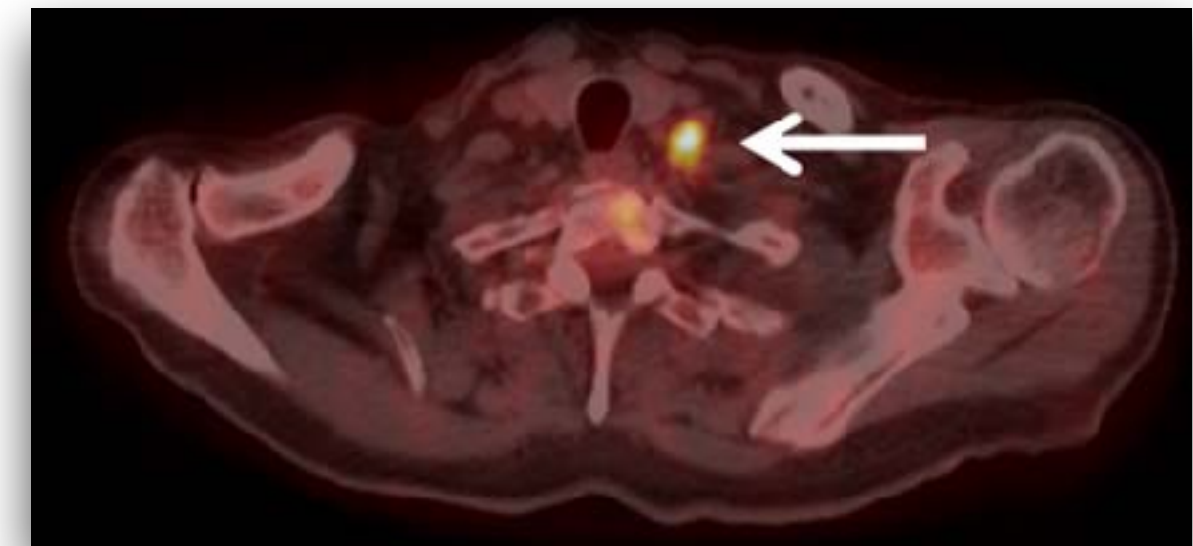
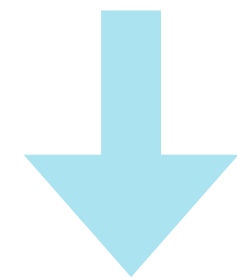
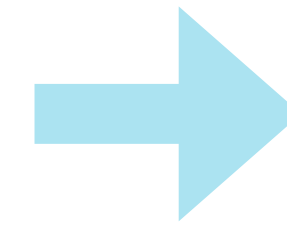
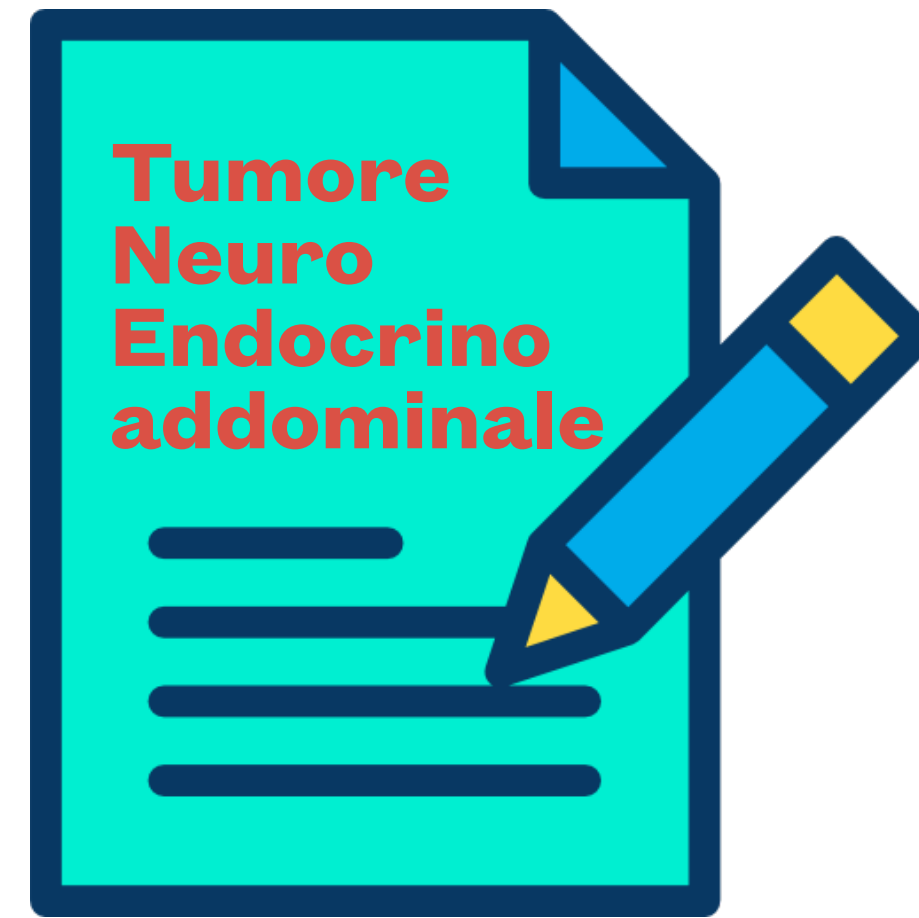
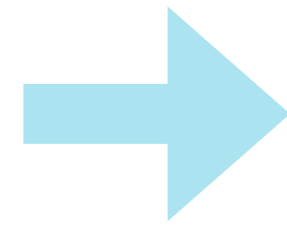
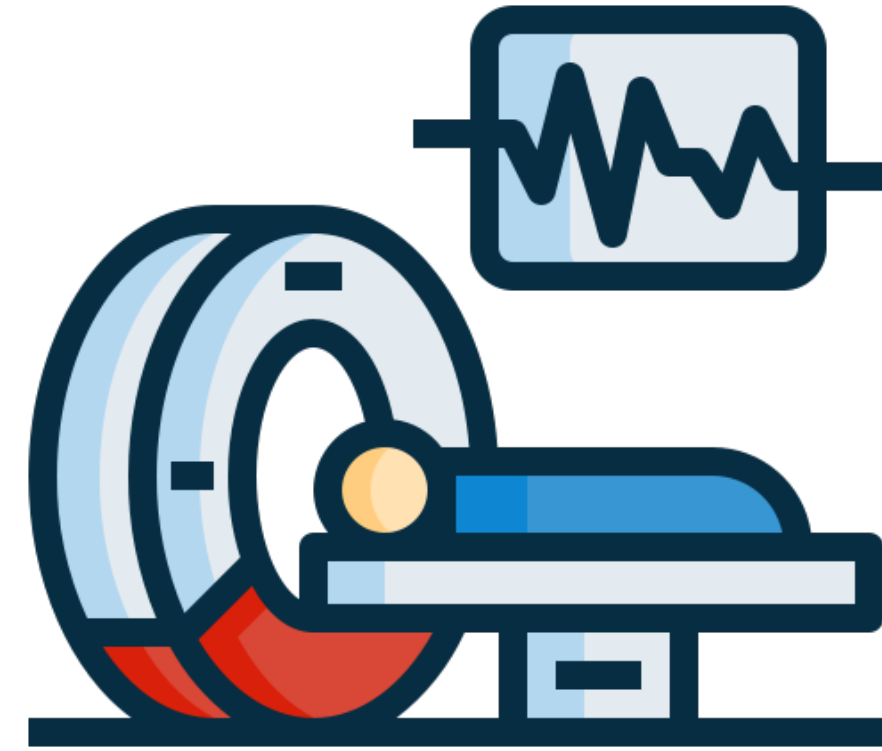
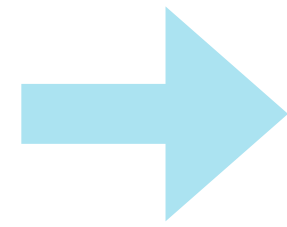


~1-10cm



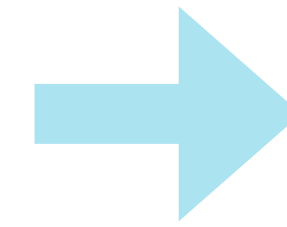
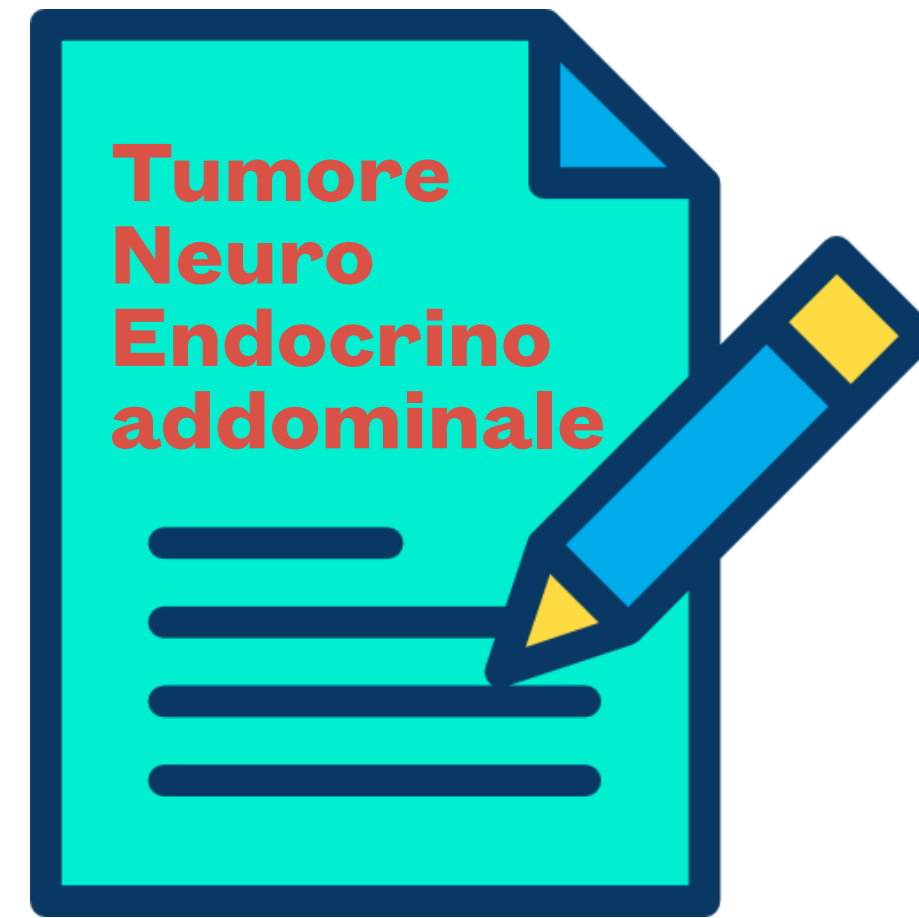
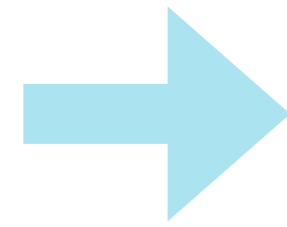
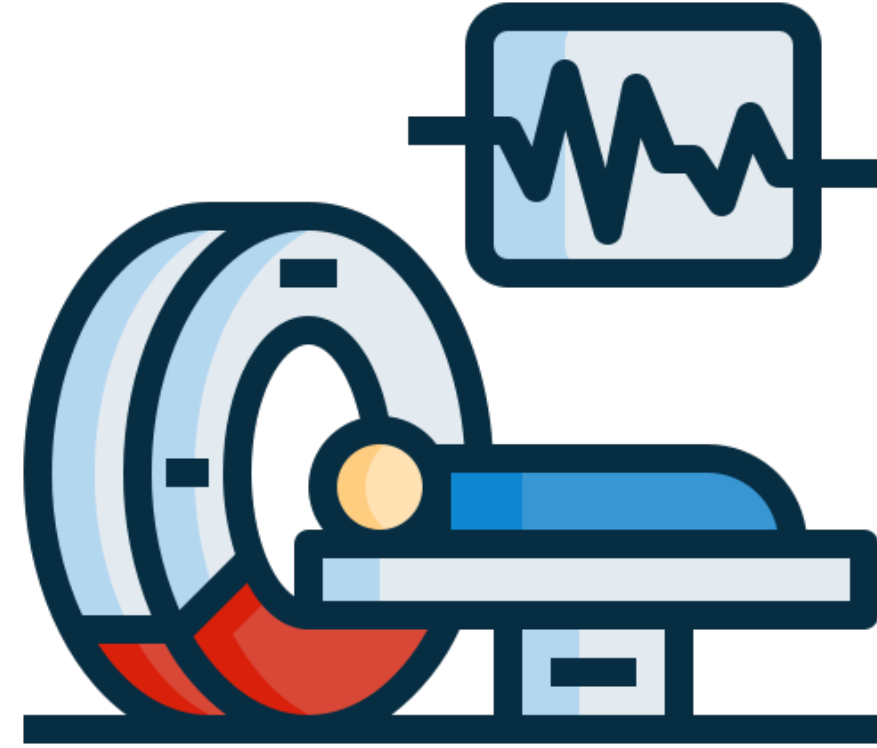
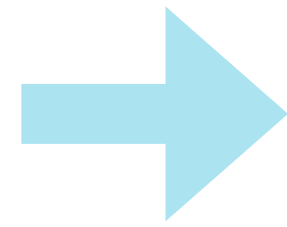
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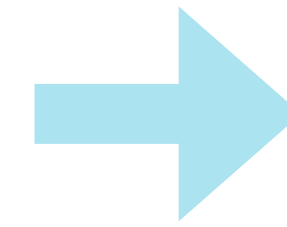
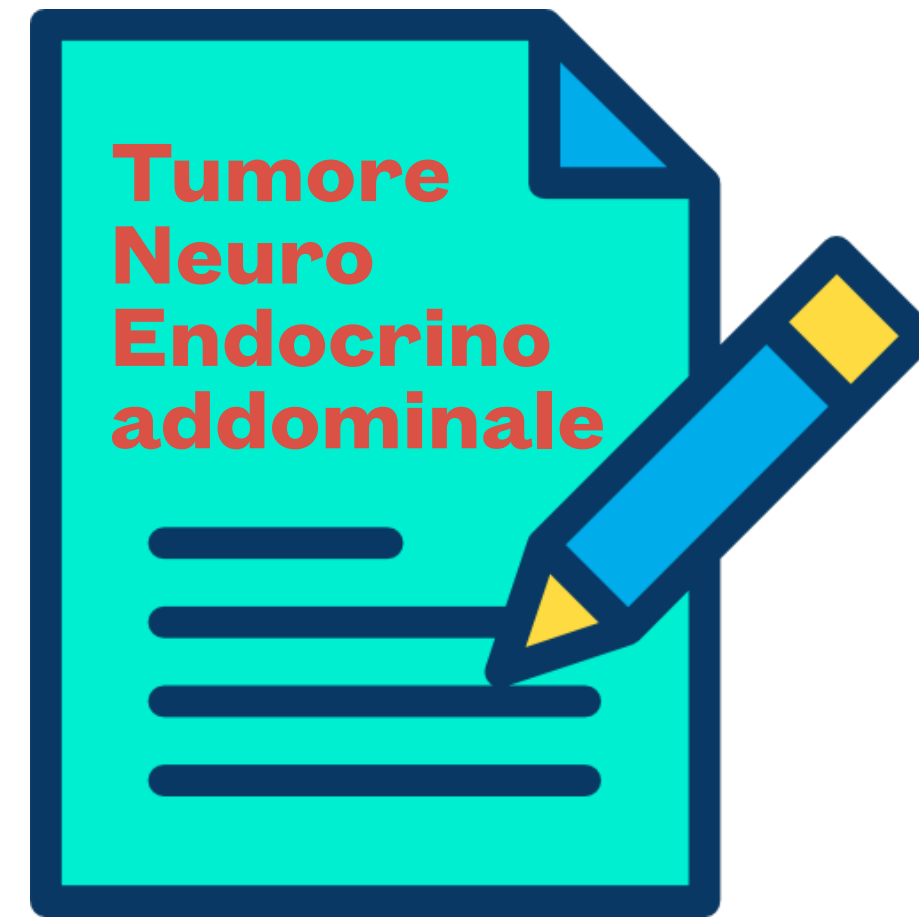
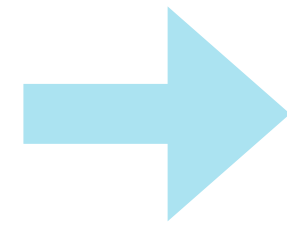
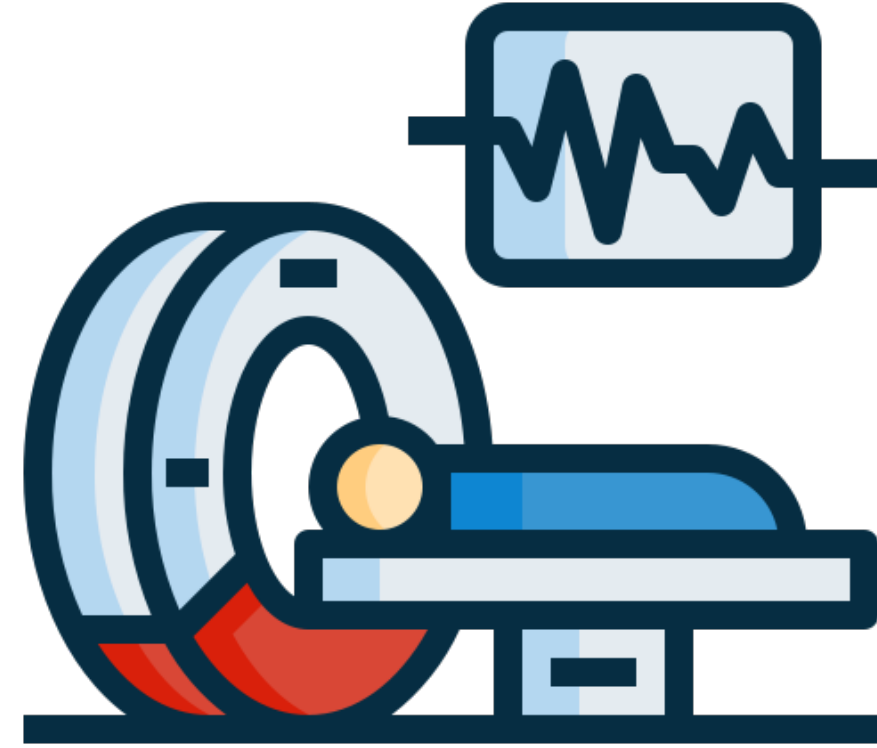
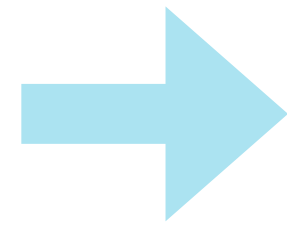
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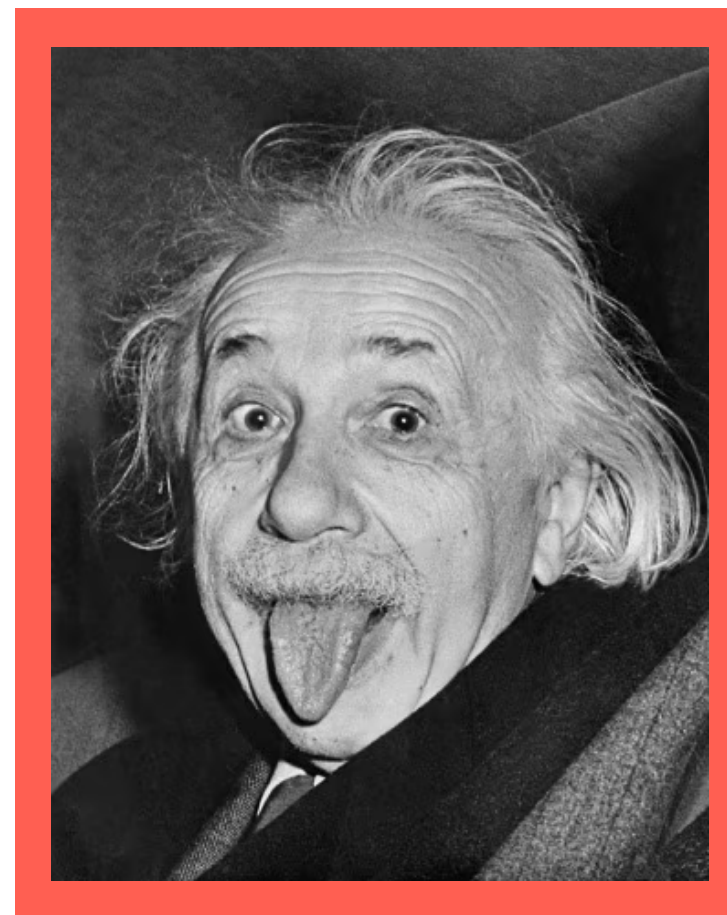


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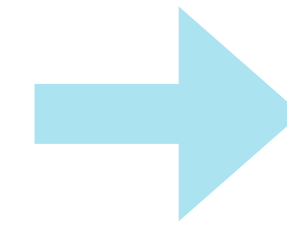
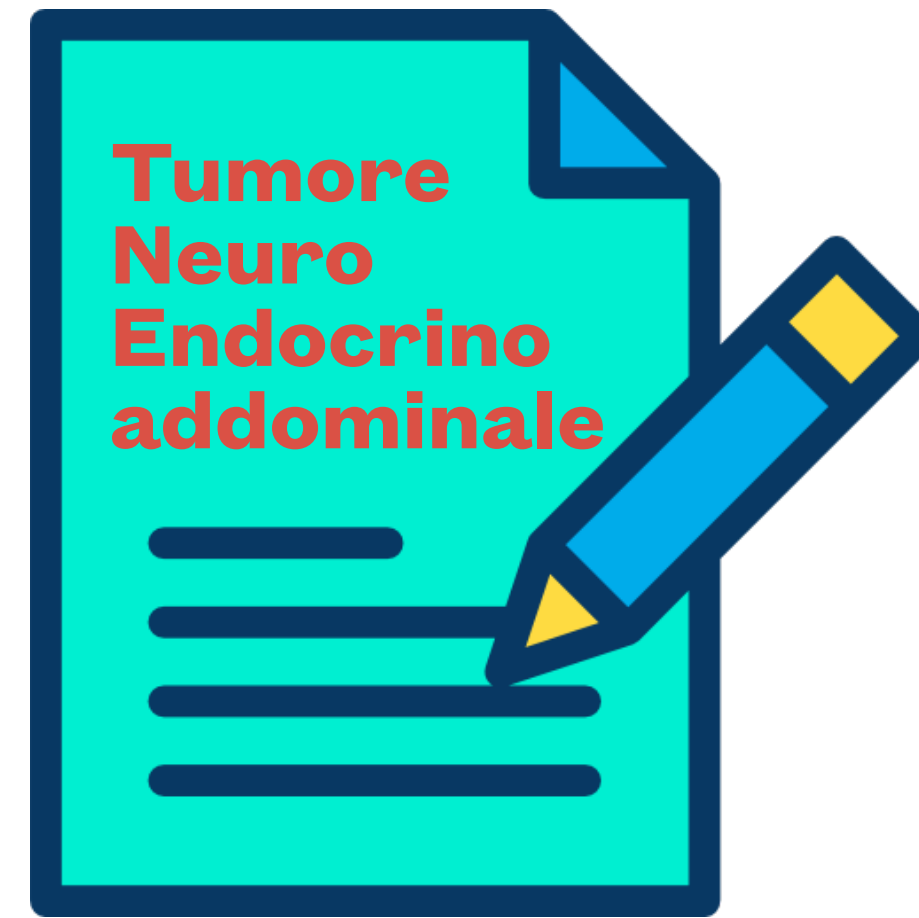
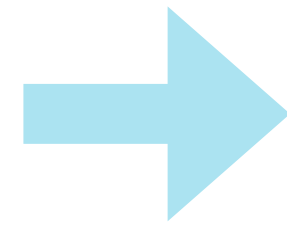
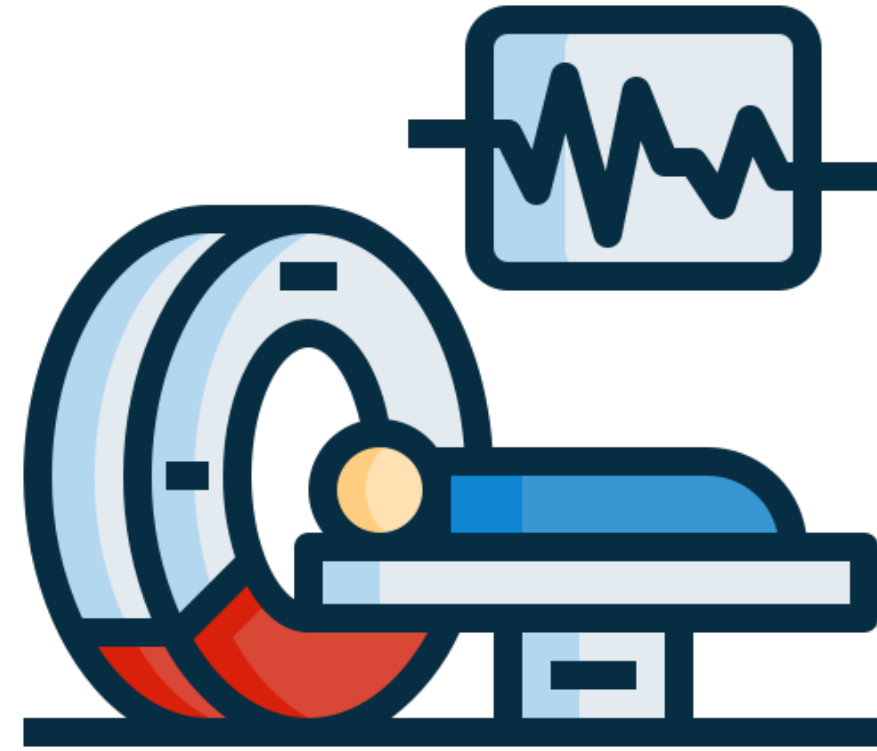
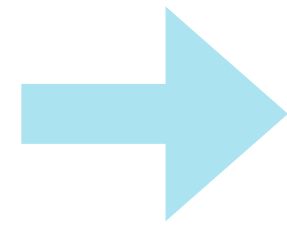


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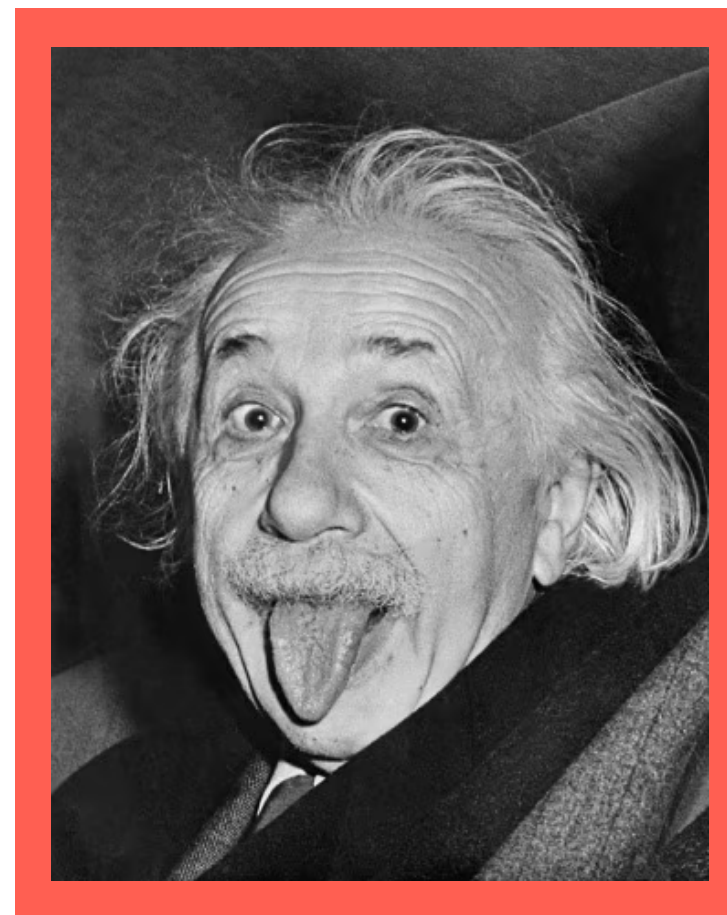


β-RGS!

~1-10cm → ~1-10mm



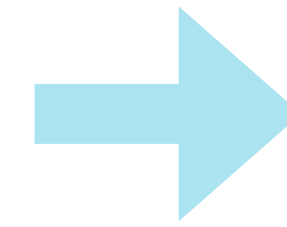
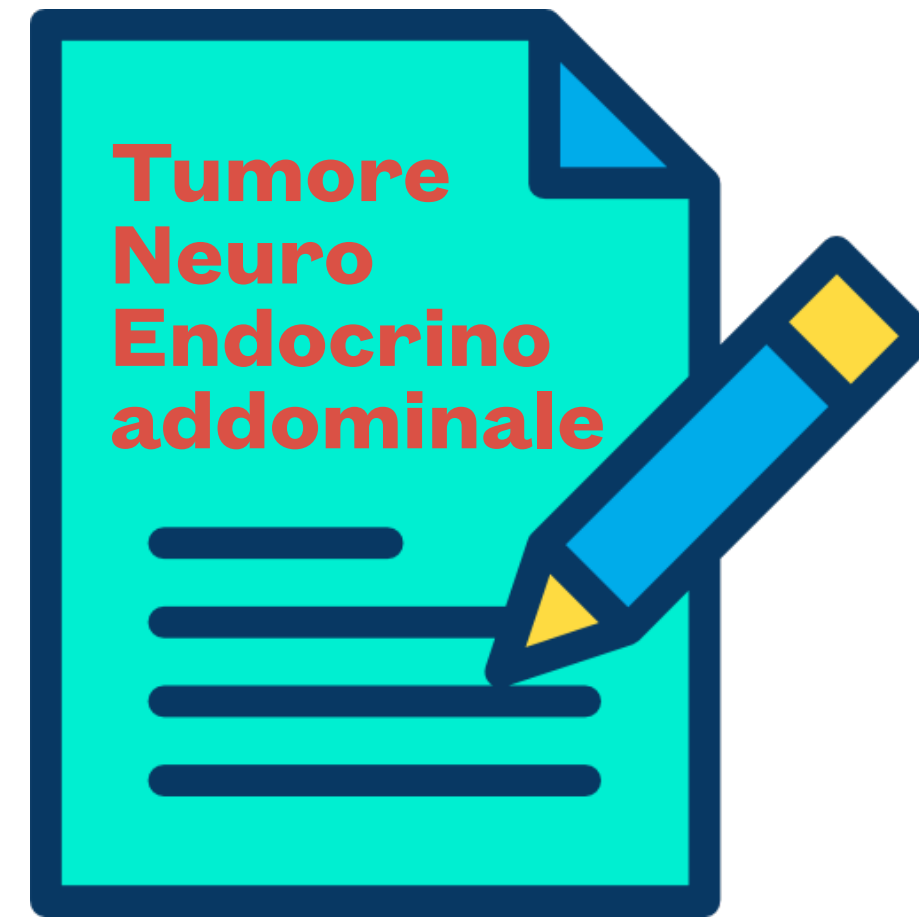
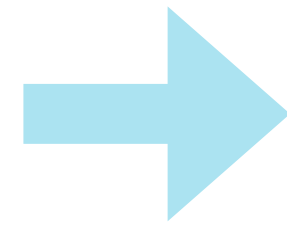
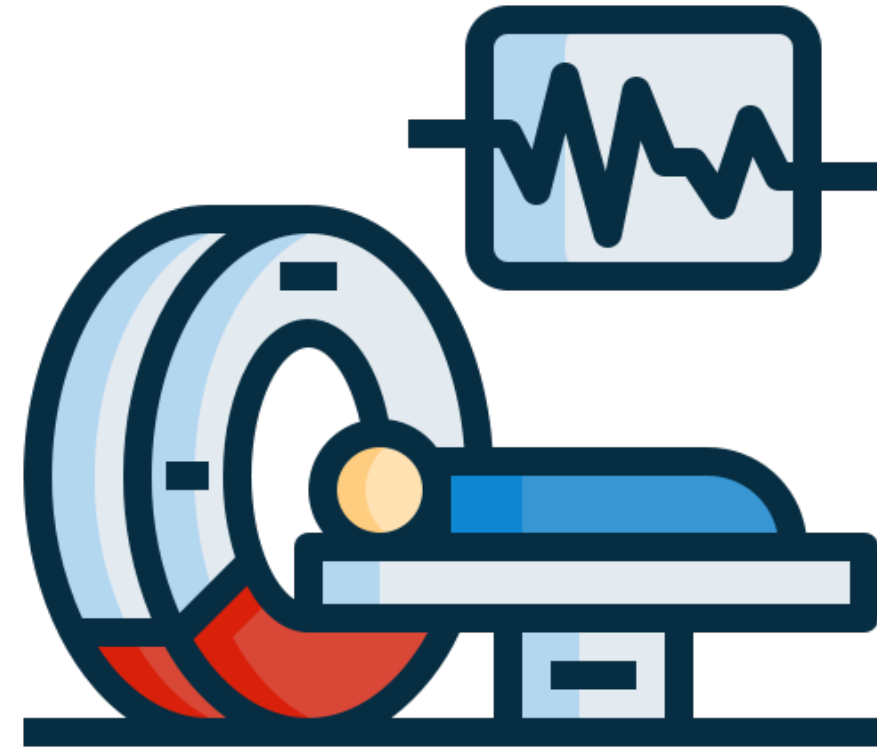
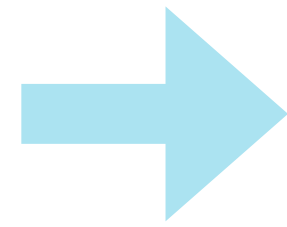
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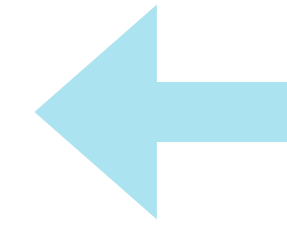
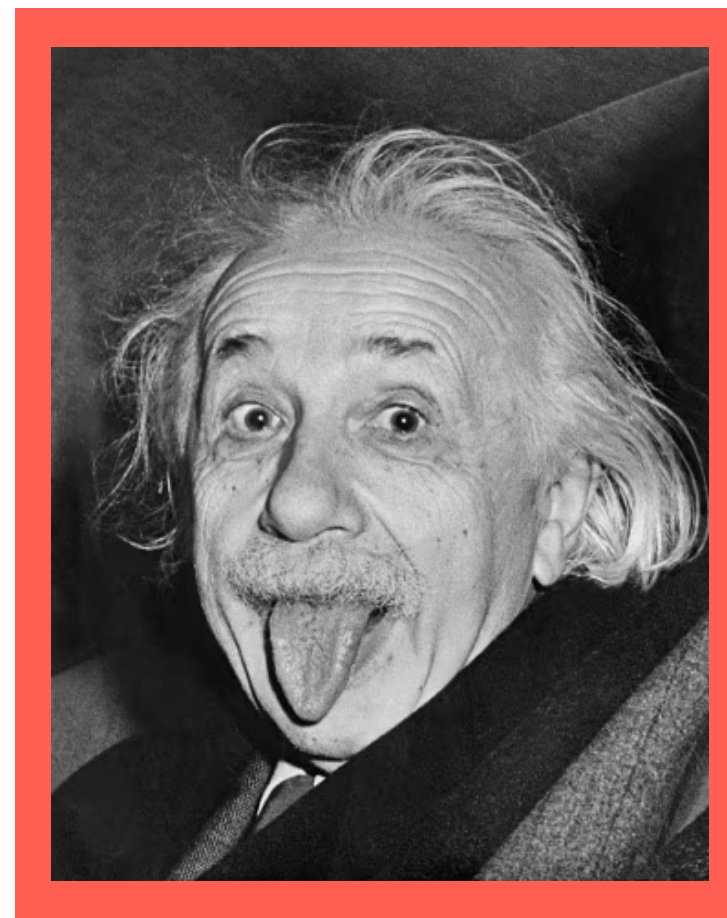
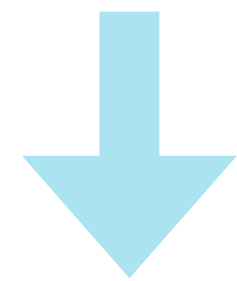
β-RGS!

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Come asportare **tutto** il tumore?



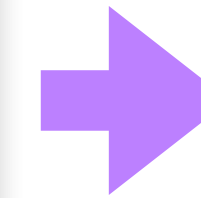
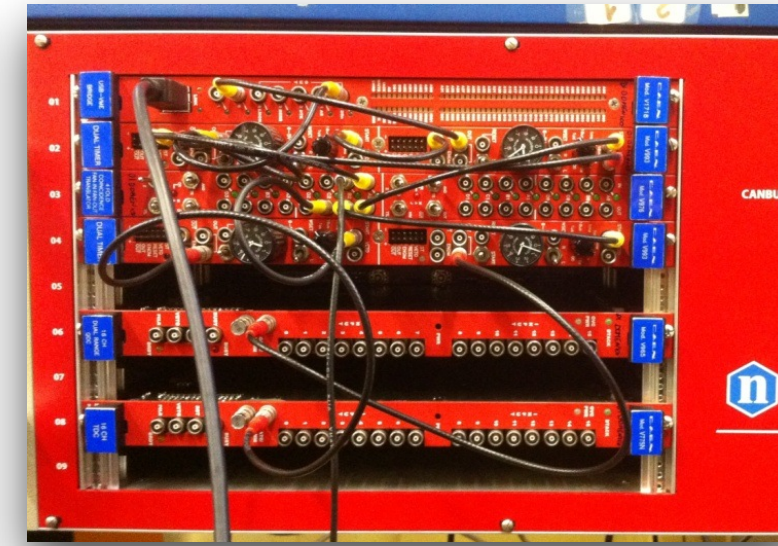
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2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024

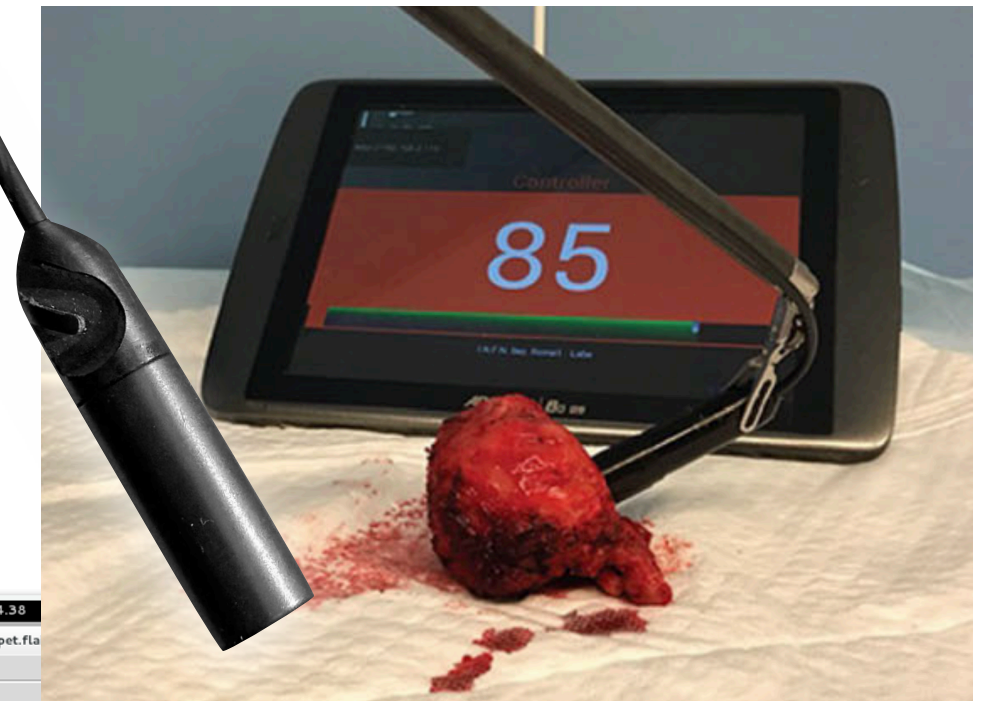
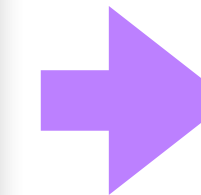
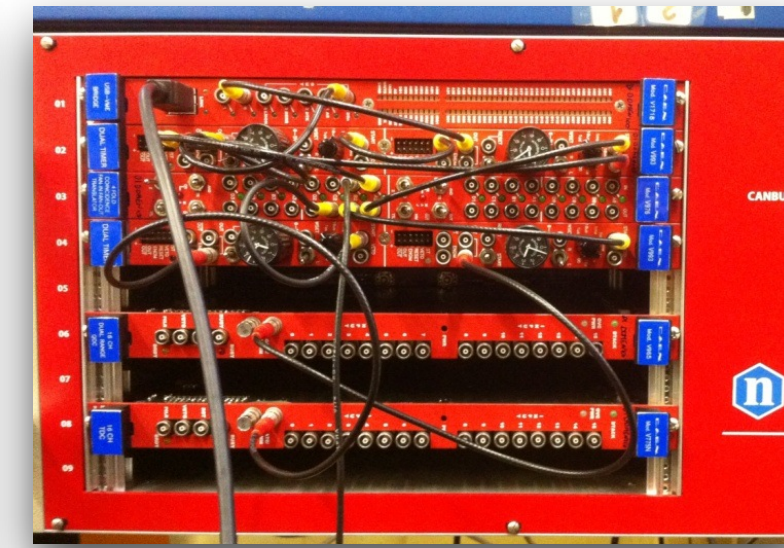
► **Proposta dell'idea innovativa: usare radiazione β^- e rivelatori di soli **elettroni****

- ▶ Proposta dell'idea innovativa: usare radiazione β^- e rivelatori di soli **elettroni**
 - ▶ Sviluppo rivelatore e sua ottimizzazione

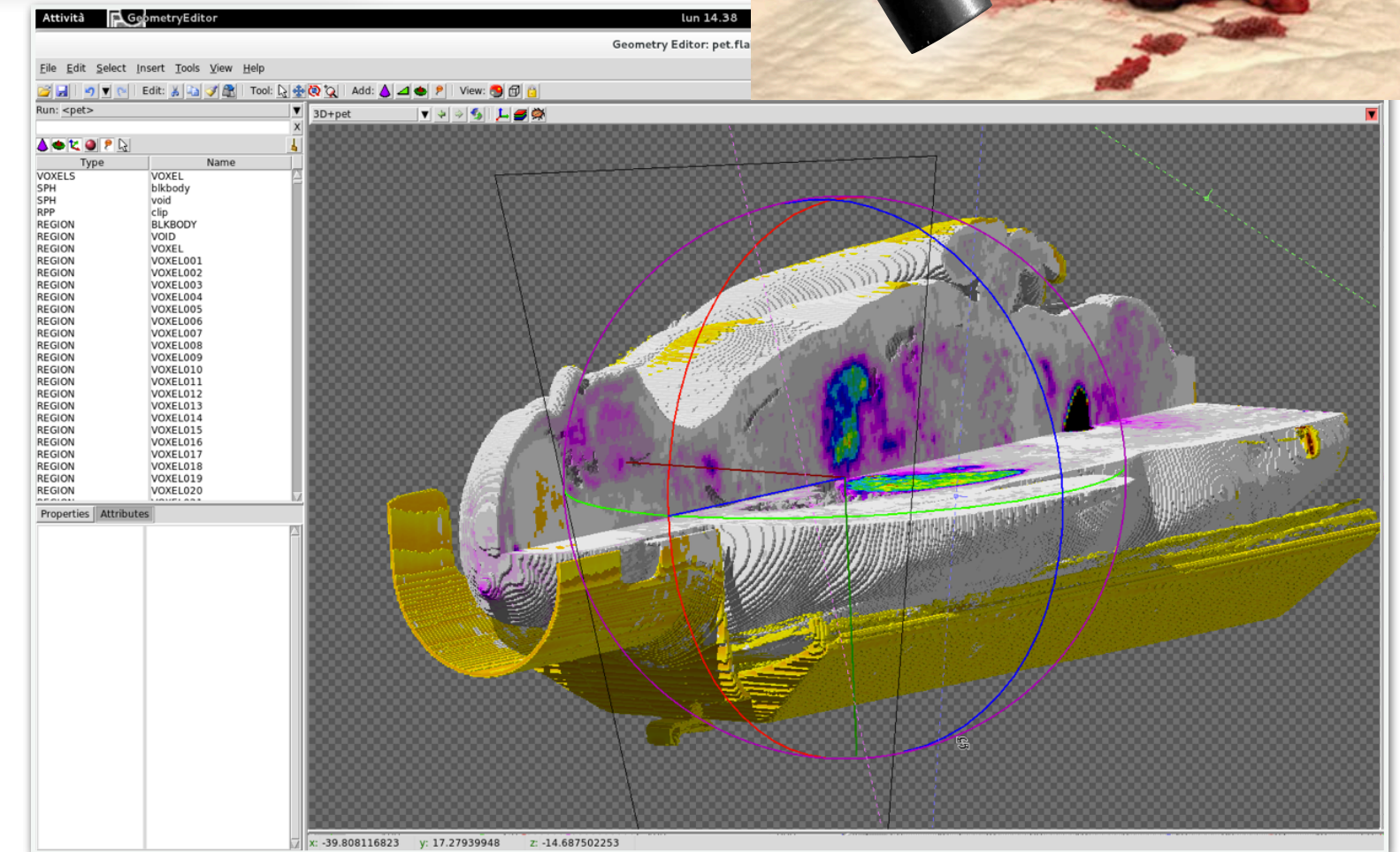


► Proposta dell'idea innovativa: usare radiazione β^- e rivelatori di soli elettroni

► Sviluppo rivelatore e sua ottimizzazione

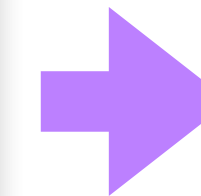
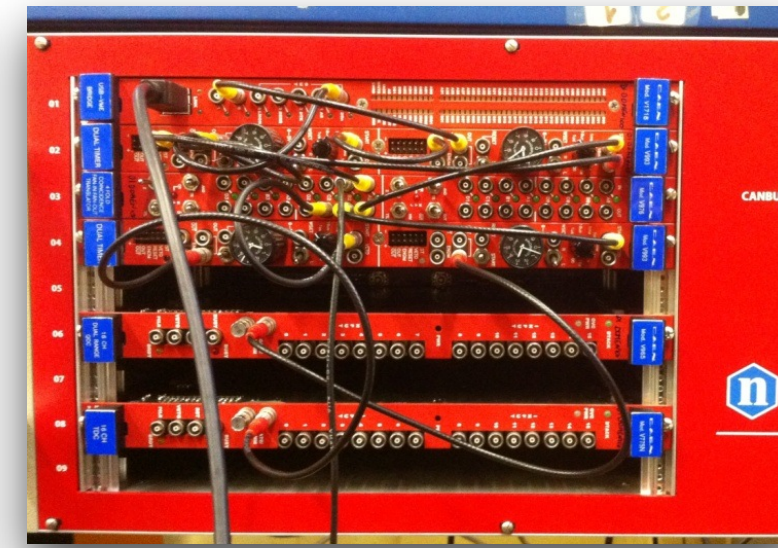


► Studi Monte Carlo di possibili casi applicativi



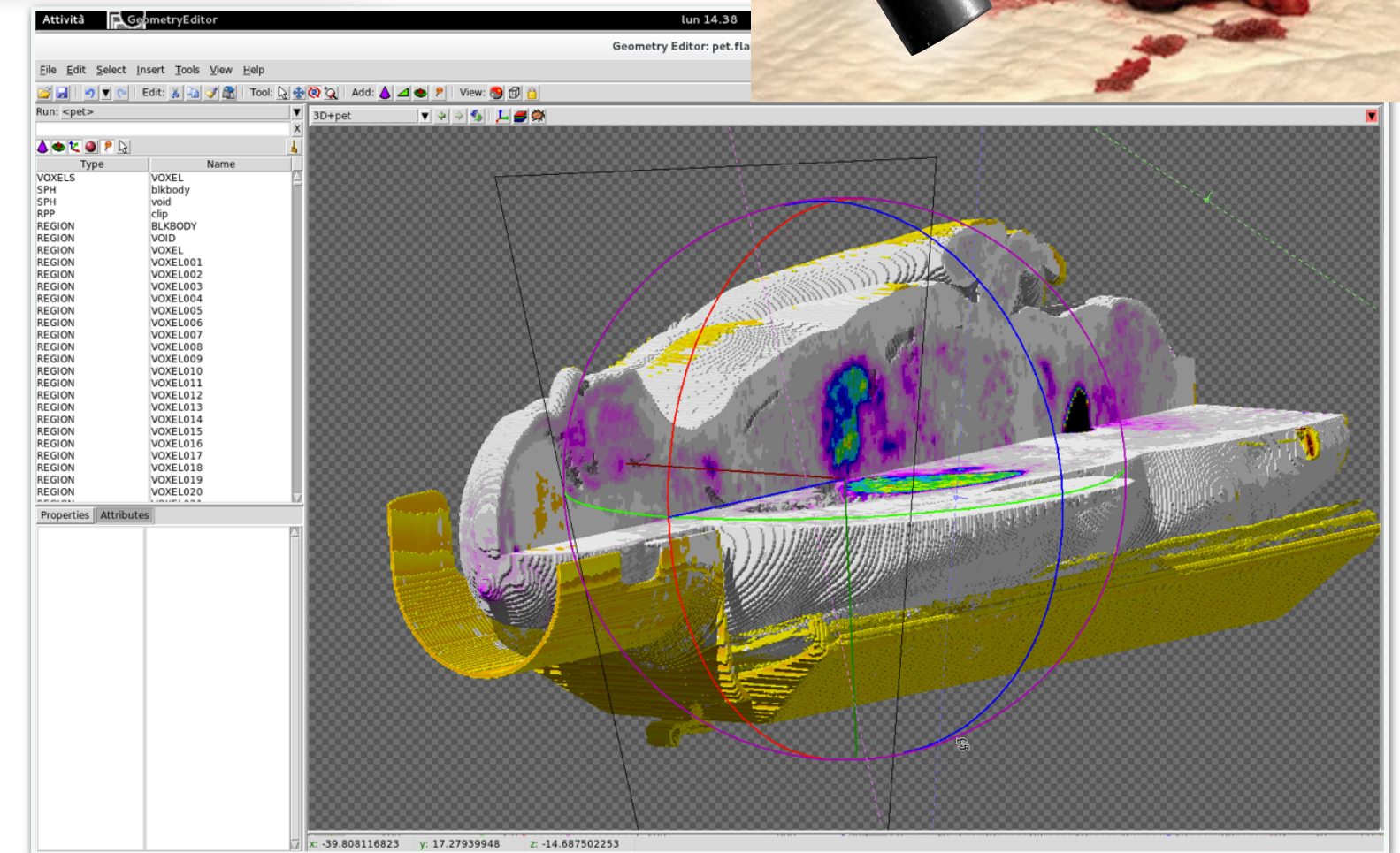
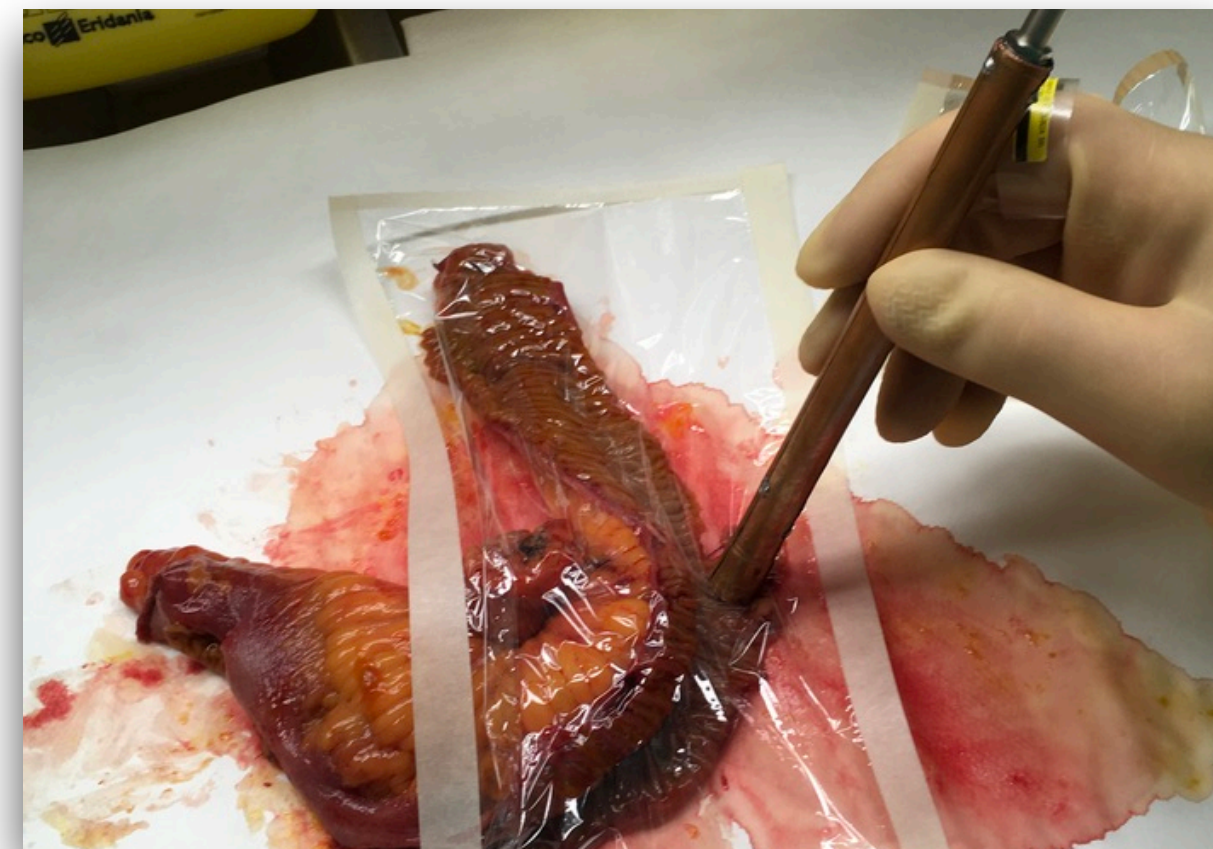
► Proposta dell'idea innovativa: usare radiazione β^- e rivelatori di soli elettroni

► Sviluppo rivelatore e sua ottimizzazione



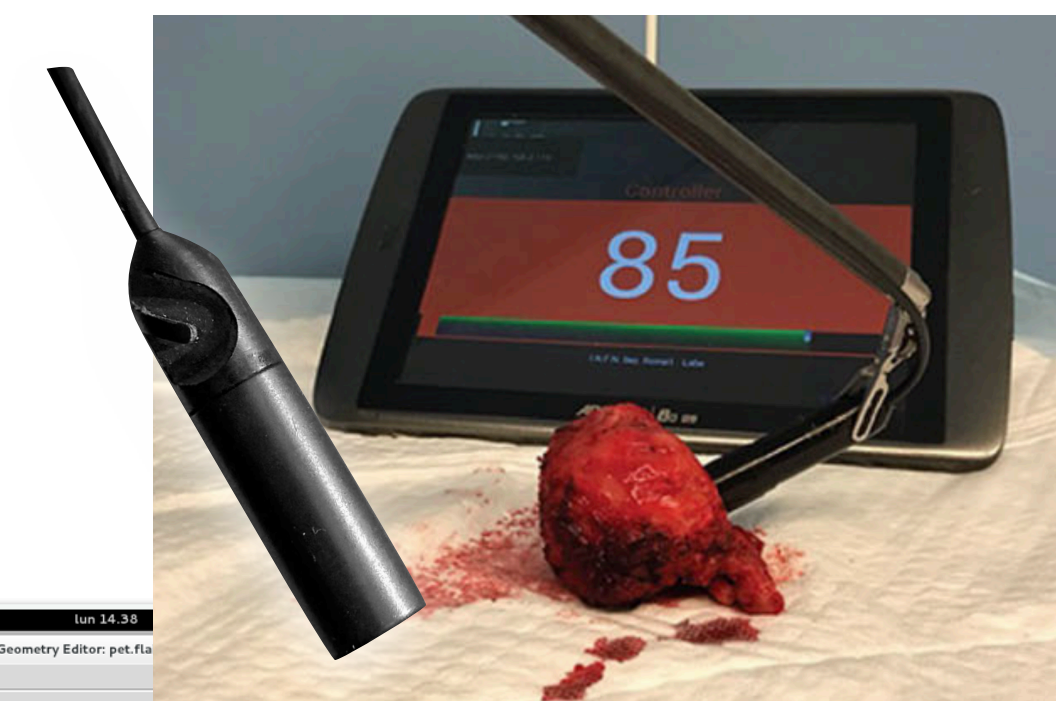
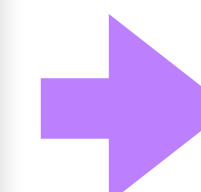
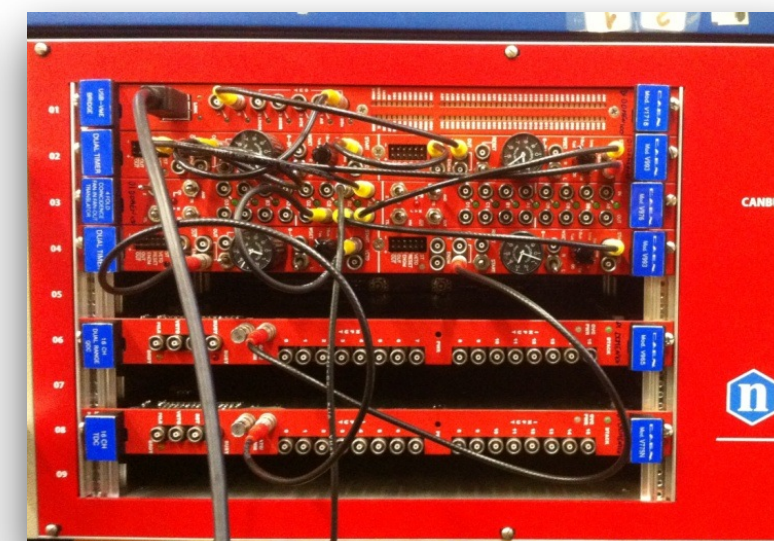
► Studi Monte Carlo di possibili casi applicativi

► Test ex-vivo @IEO-Mi



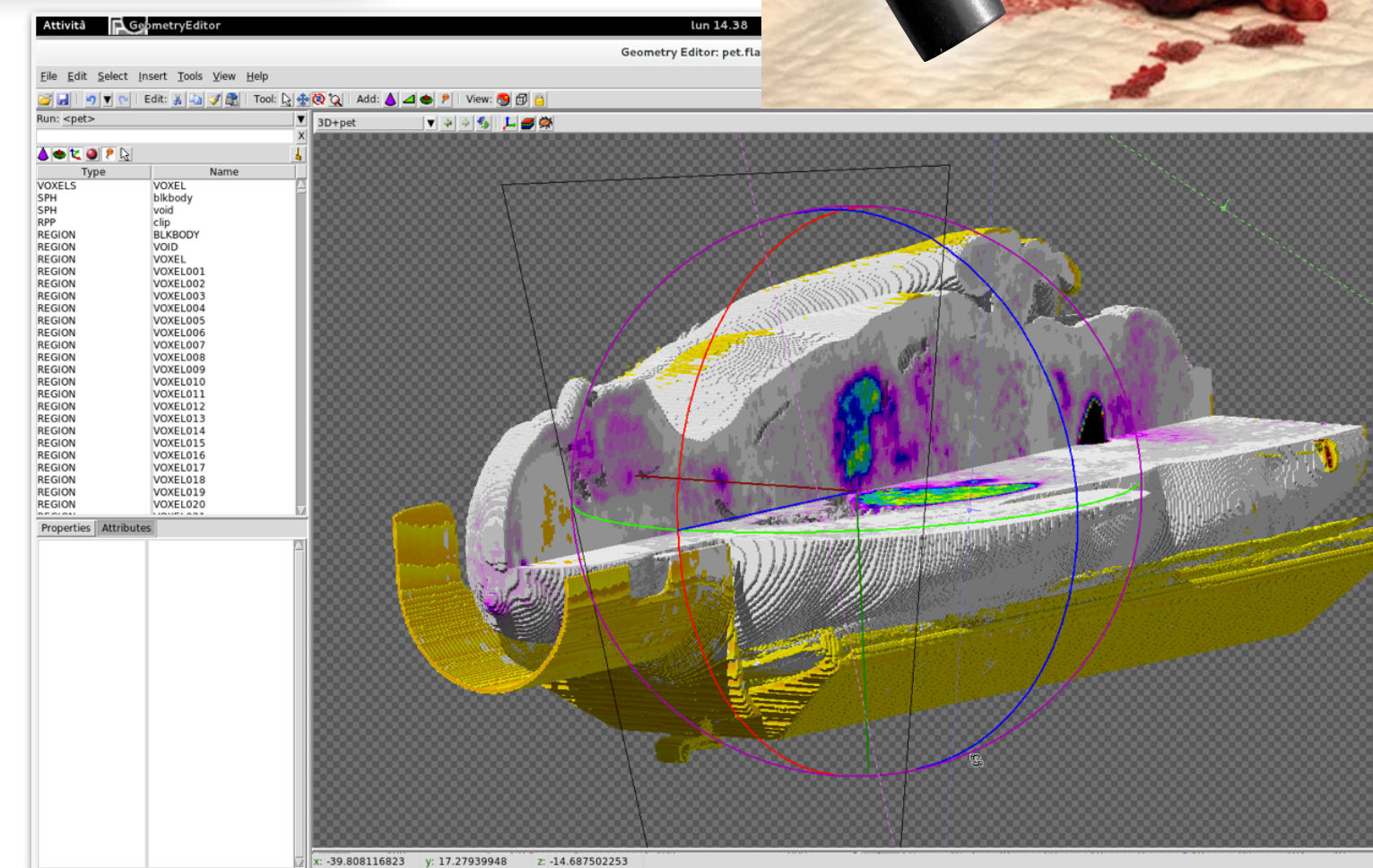
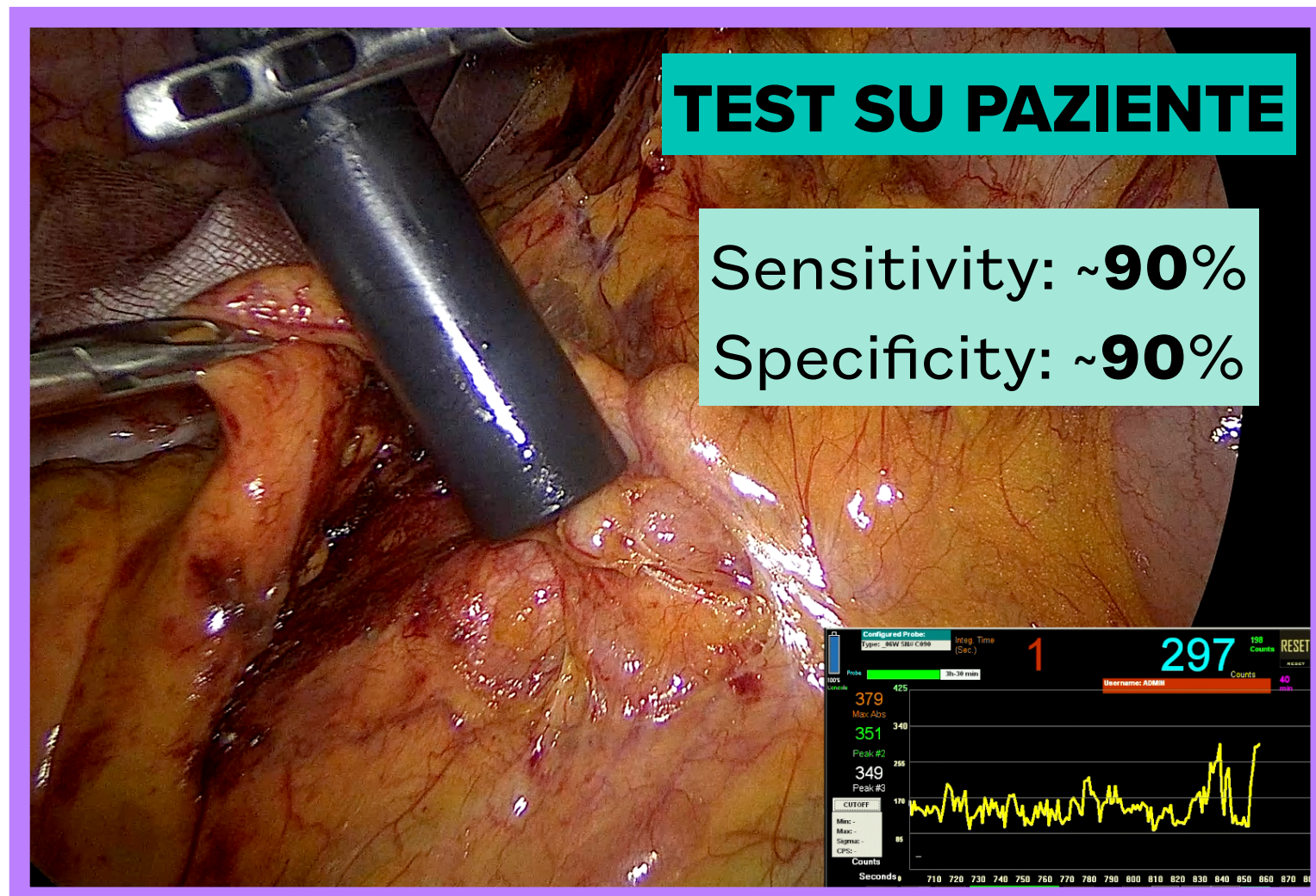
► Proposta dell'idea innovativa: usare radiazione β^- e rivelatori di soli elettroni

► Sviluppo rivelatore e sua ottimizzazione



► Studi Monte Carlo di possibili casi applicativi

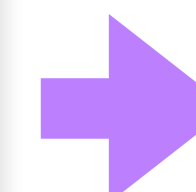
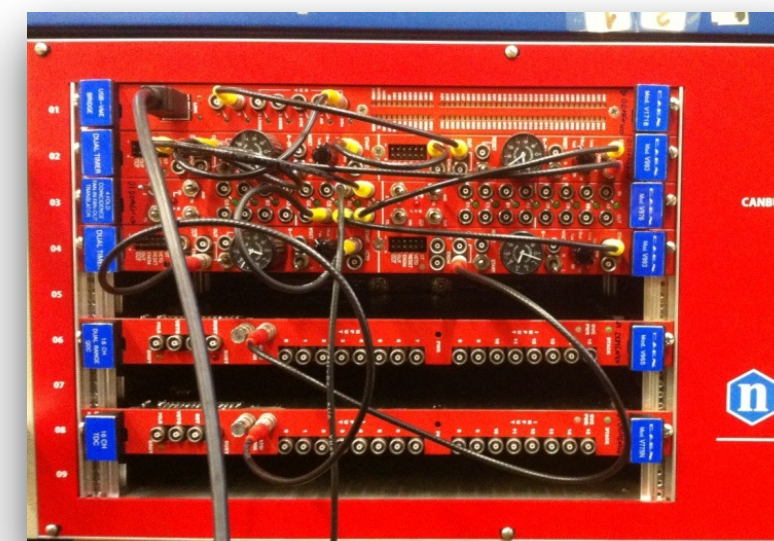
► Test ex-vivo @IEO-Mi



► Test in-vivo @IEO-Mi su oltre 40 pazienti con ^{68}Ga

► Proposta dell'idea innovativa: usare radiazione β^- e rivelatori di soli elettroni

► Sviluppo rivelatore e sua ottimizzazione

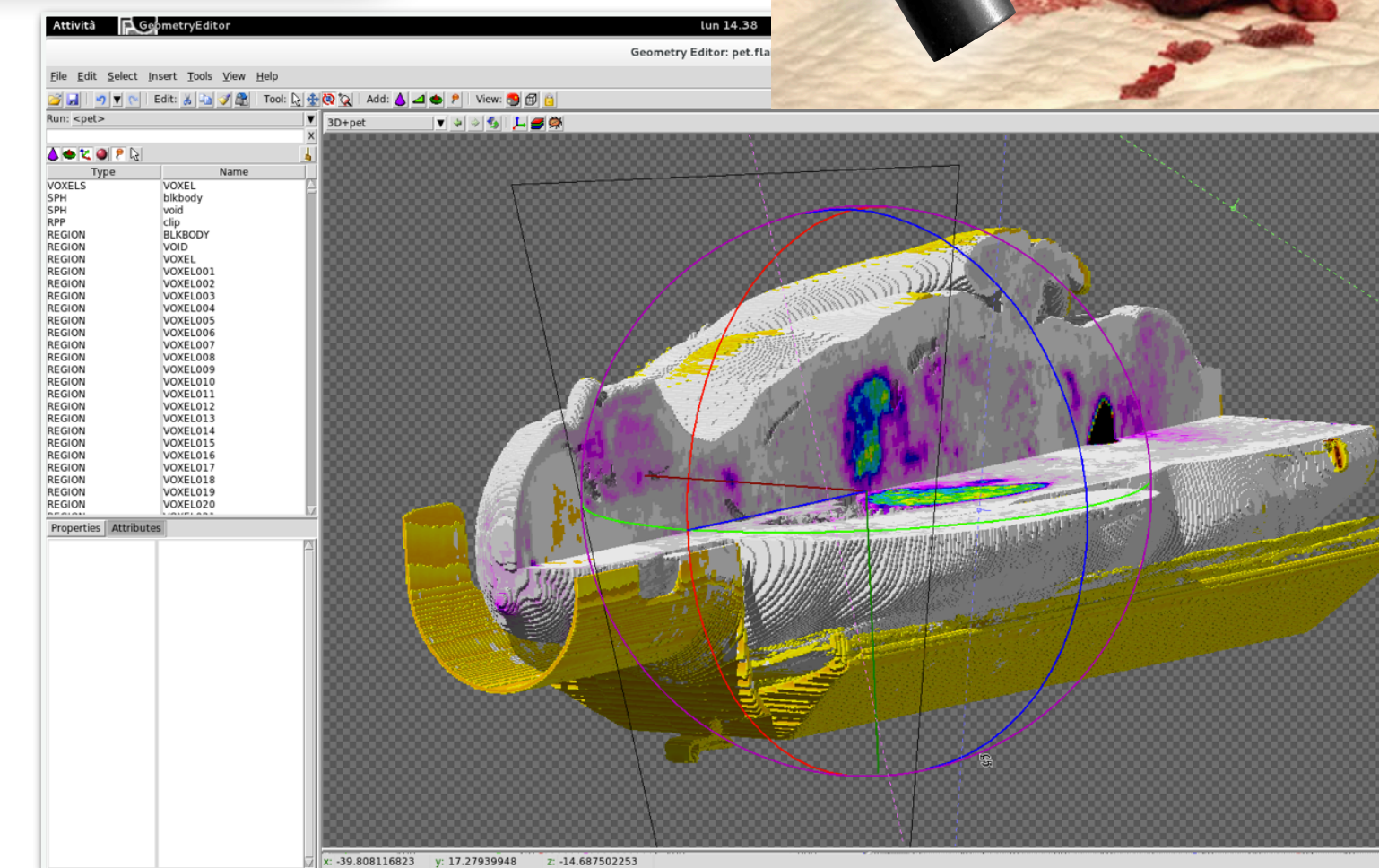


► Studi Monte Carlo di possibili casi applicativi

► Test ex-vivo @IEO-Mi

TEST SU PAZIENTE

Sensitivity: ~90%
Specificity: ~90%



► Test in-vivo @IEO-Mi su oltre 40 pazienti con ^{68}Ga

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20 LUGLIO 2023

ALLO IEO LA SONDA "CERCA-TUMORE" MIGLIORA LA CHIRURGIA



Un team congiunto di medici, ricercatrici e ricercatori dell'Istituto Europeo di Oncologia (IEO), dell'Istituto Nazionale di Fisica Nucleare (INFN) e di Sapienza Università di Roma, coordinato da Emilio Bertani della

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Lunedì 25 settembre 2023, 09:47 ANSAcheck

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Temi caldi Migranti Ucraina Affitti brevi Covid Napolitano

SCIENZA / Biotech

Pronta la sonda cerca-tumore, guida la mano del chirurgo

Testata su 20 pazienti, ha dimostrato di essere molto efficace

22 luglio 2023, 09:22 Redazione ANSA



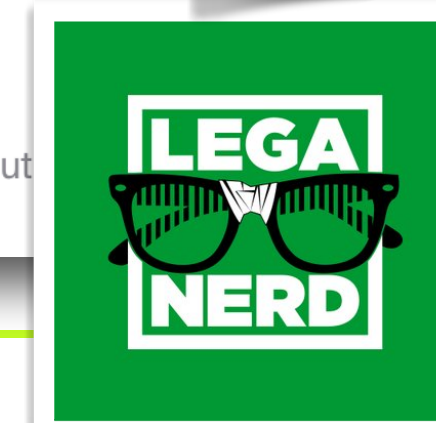
È pronta la sonda cerca-tumore, individua con precisione i tessuti malati (fonte: FreePik) - RIPRODUZIONE RISERVATA

tech4health t4h

Notícia

Sonda para detecção de tumores melhora cirurgia gastrointestinal

Estudo clínico demonstrou a eficácia de sonda inovadora na identificação precisa de tecidos tumorais a serem removidos durante cirurgia para tumores neuroendócrinos

Il Team

RADIANTIS RESEARCH

Chasing precision in Oncology



Dr. Daniele Pili, CEO

- ▶ Ing. Gestionale, esperienza in aziende farmaceutiche



Dr. Francesco Ceci

- ▶ Medico Nucleare, direttore Med. Nuc. IEO Milano



Dr. Emilio Bertani

- ▶ Chirurgo, direttore Unità Chirurgica NET IEO Milano



Dr. Francesco Collamati

- ▶ Ricercatore INFN, fra gli ideatori della sonda