



Gitte Dam, læge, PhD
Lever, Mave tarm sygdomme
ENETS NET center of Excellence
Aarhus Universitets Hospital

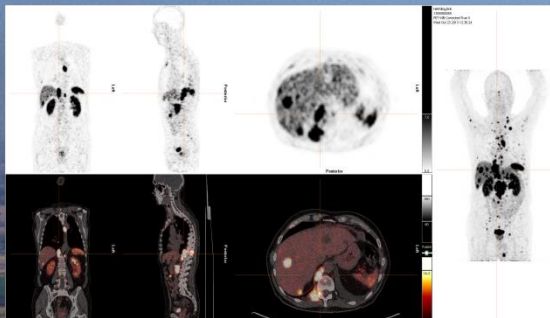


European
ENETS CoE
 Neuroendocrine Tumor Society

ENETS Centers of Excellence

Assuring Quality since 2009

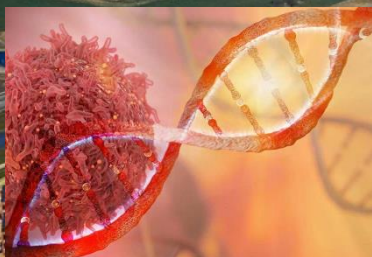




PET
Nuklear medicin

Hjerte
Lungemedicin
Thoraxkirurgi

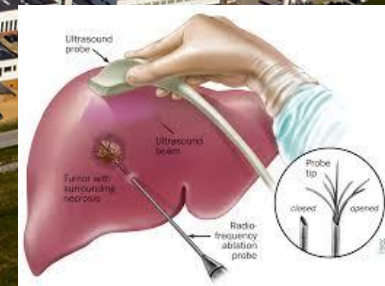
Kræftafdelingen



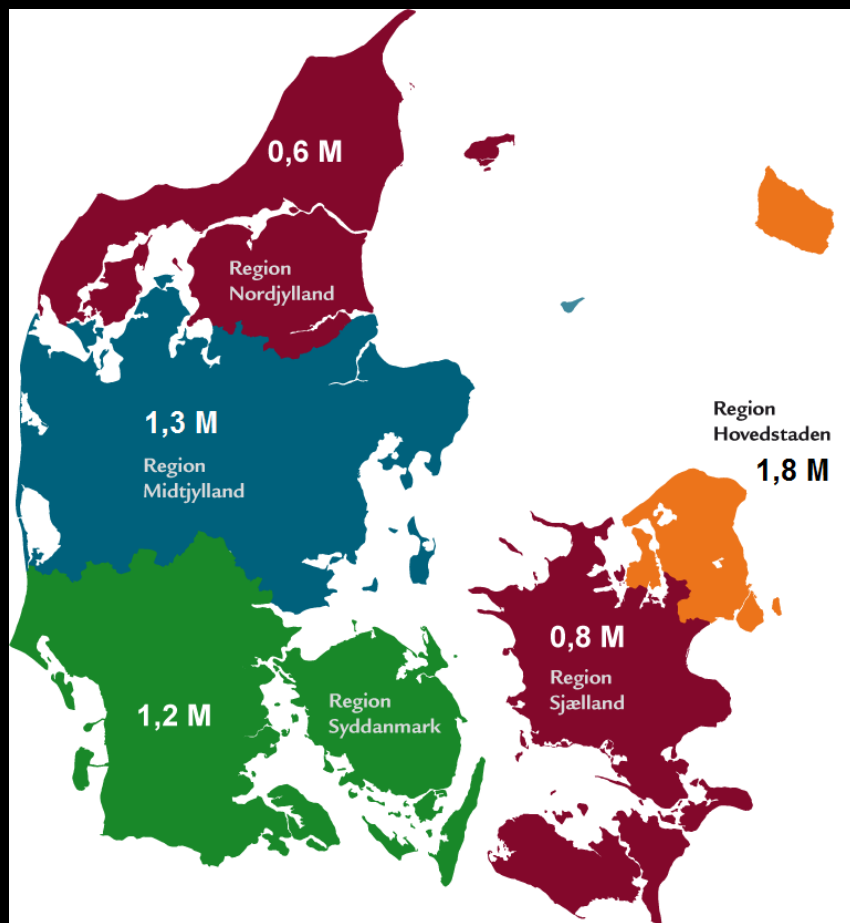
Lever og tarm
Kirurgi



Røntgen



Optageområde 1,9 mil



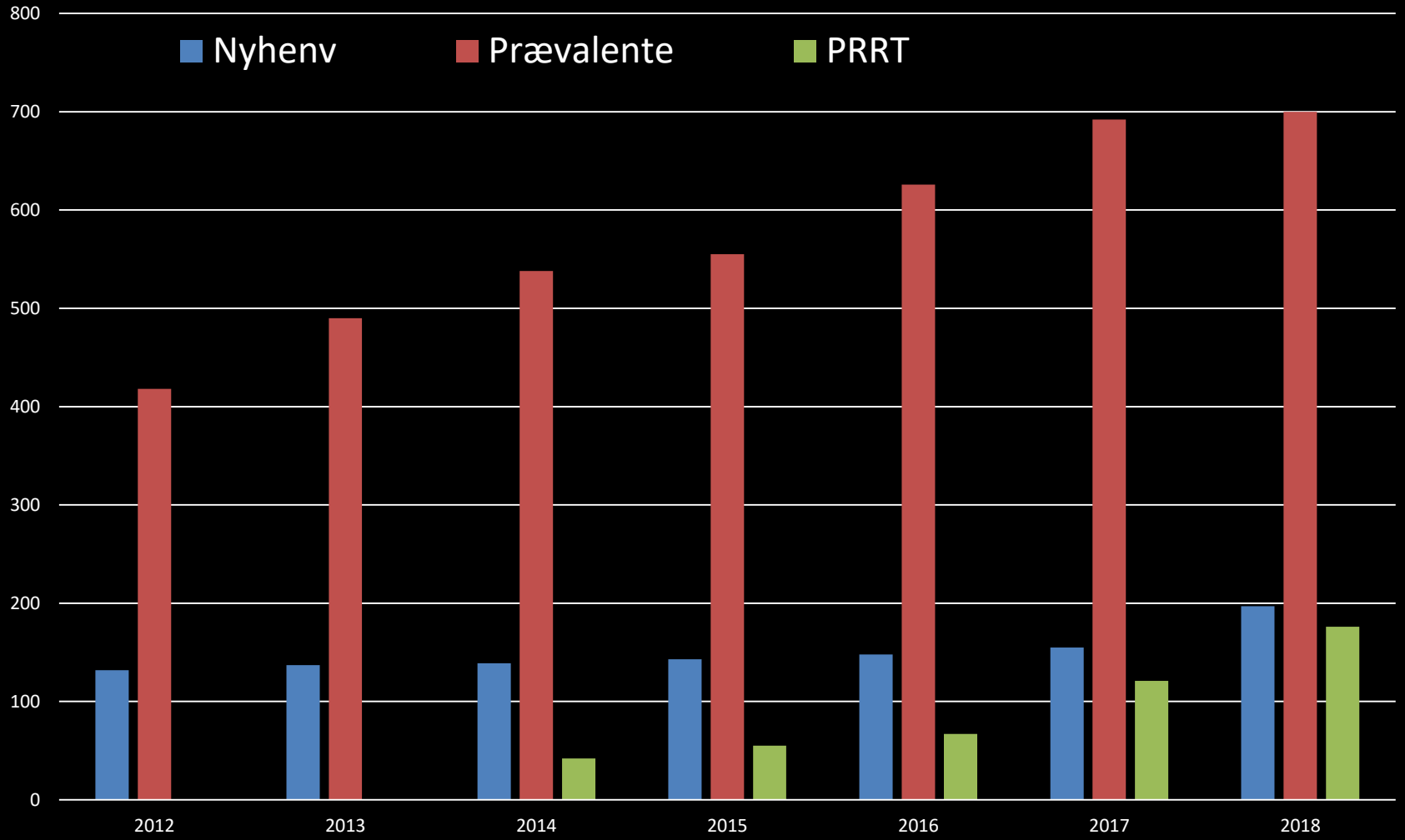
- Universitetshospital
 - Ålborg
- Regionshospitaller
 - Hjørring
 - Thisted
 - Randers
 - Horsens
 - Herning
 - Silkeborg
 - Vejle

NET patienter i Århus 2018



- 200 ny-henviste
- 700 i ambulant forløb

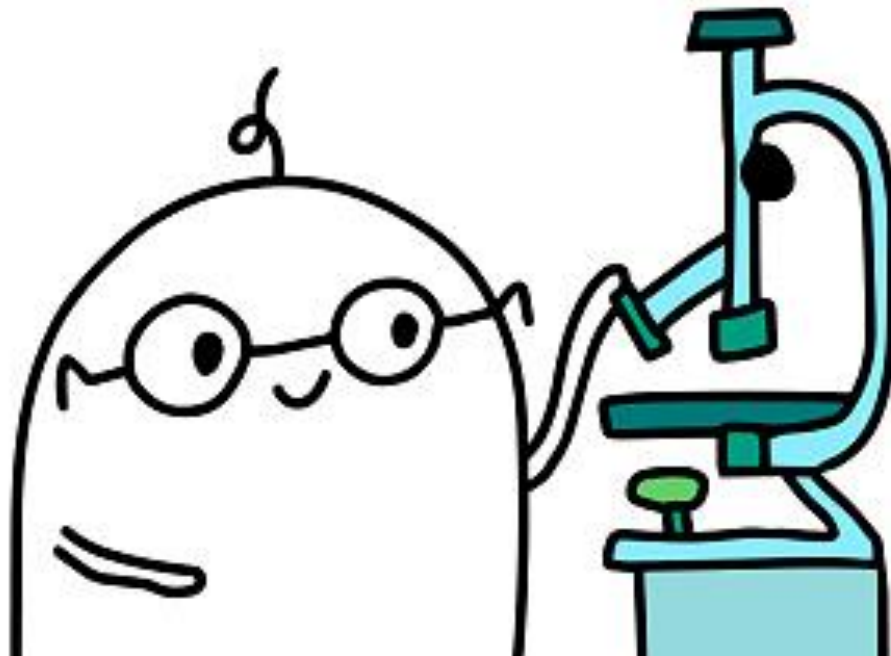
NET patienter



Udredning og behandlings plan

Dedikeret patolog

Pathologist



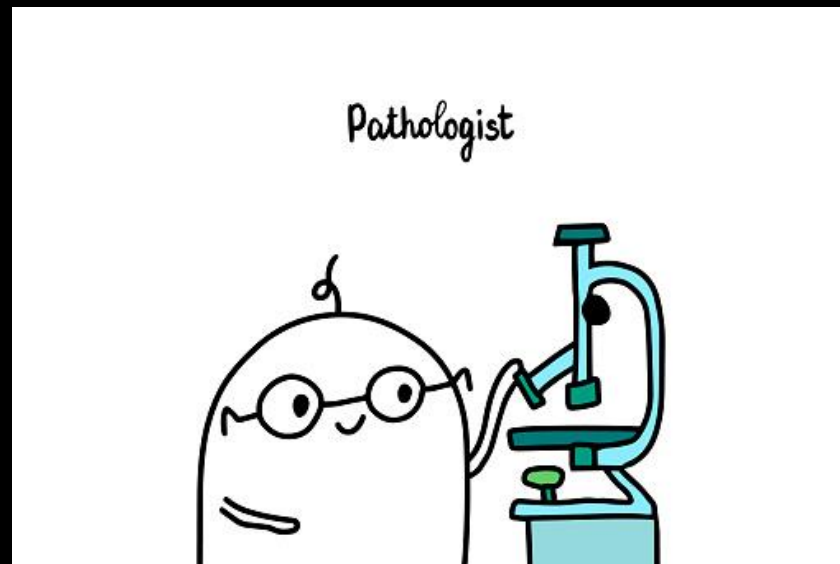
Patologen

Specialfarvninger af svulsten

Synaptofysin og chromogranin A

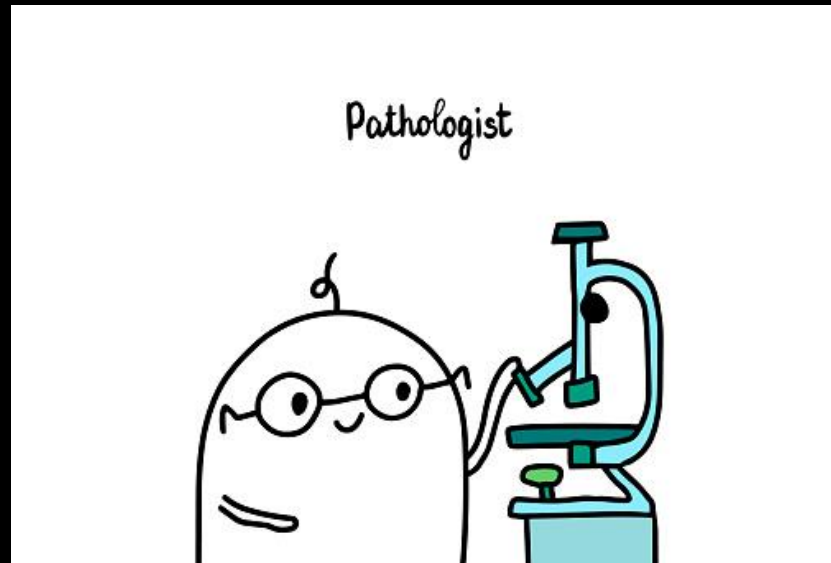
Graden (væksthastigheden)

– Ki67 indeks

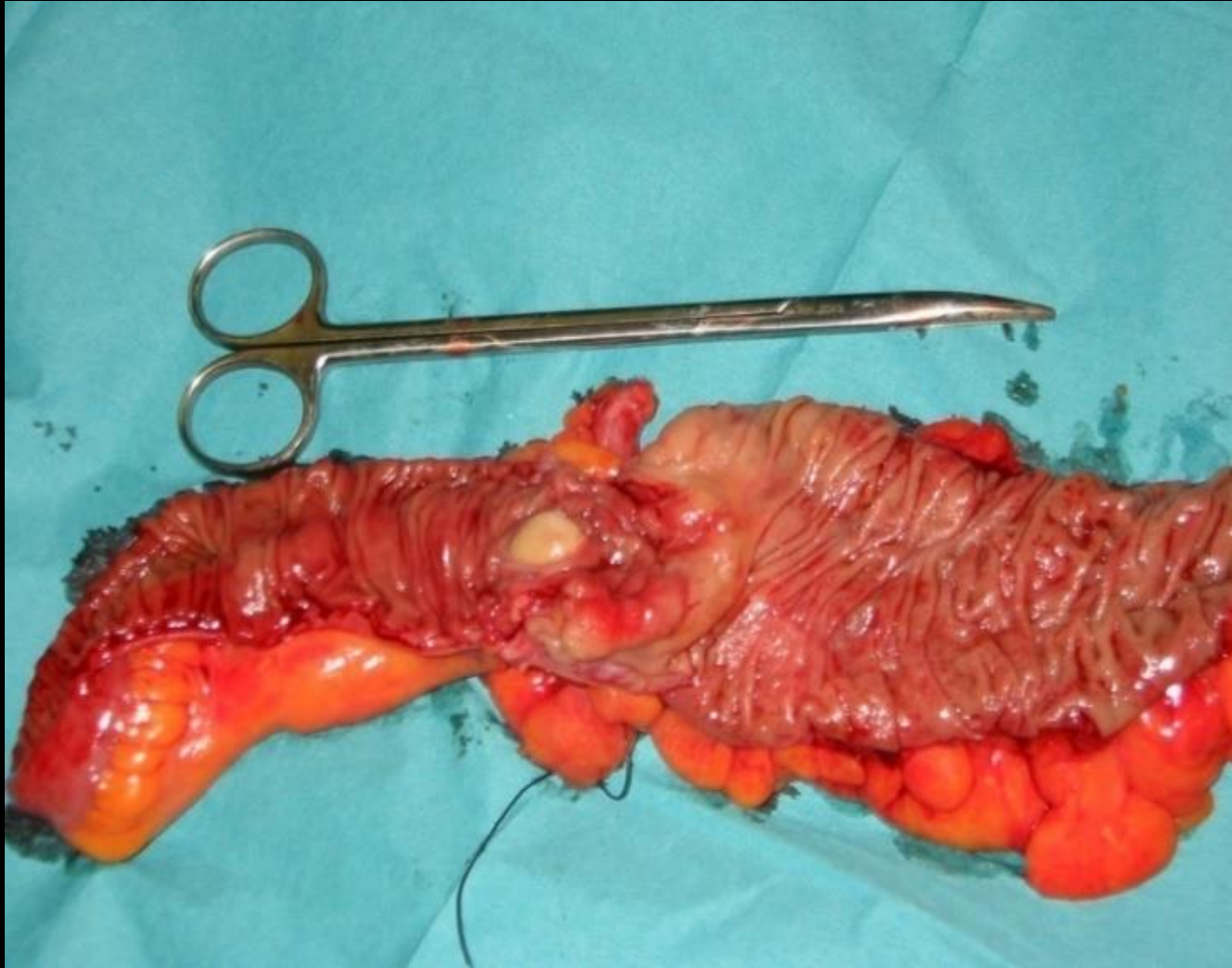


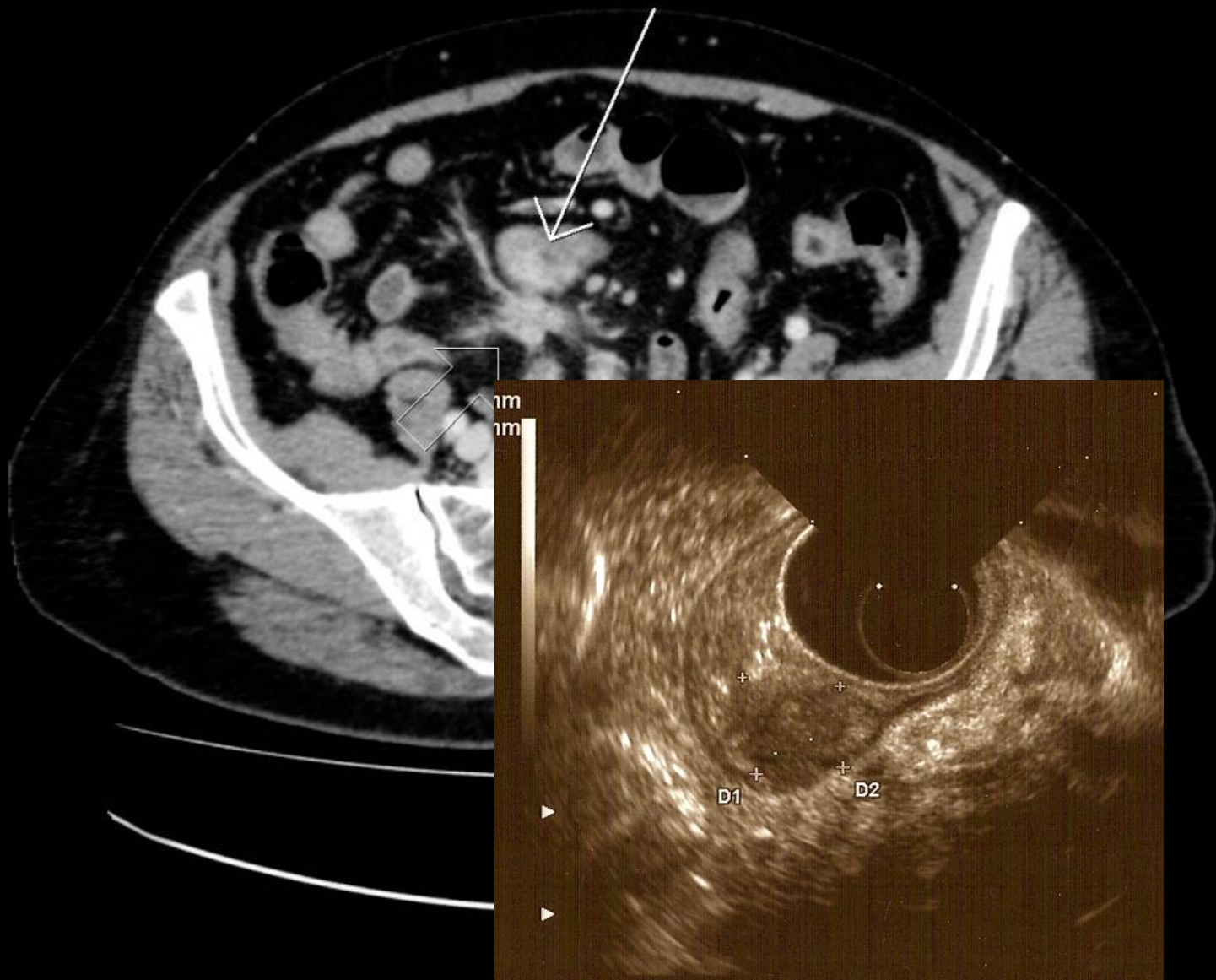
Patologen har brug for et stykke tumor

- Vævsprøve (biospi)

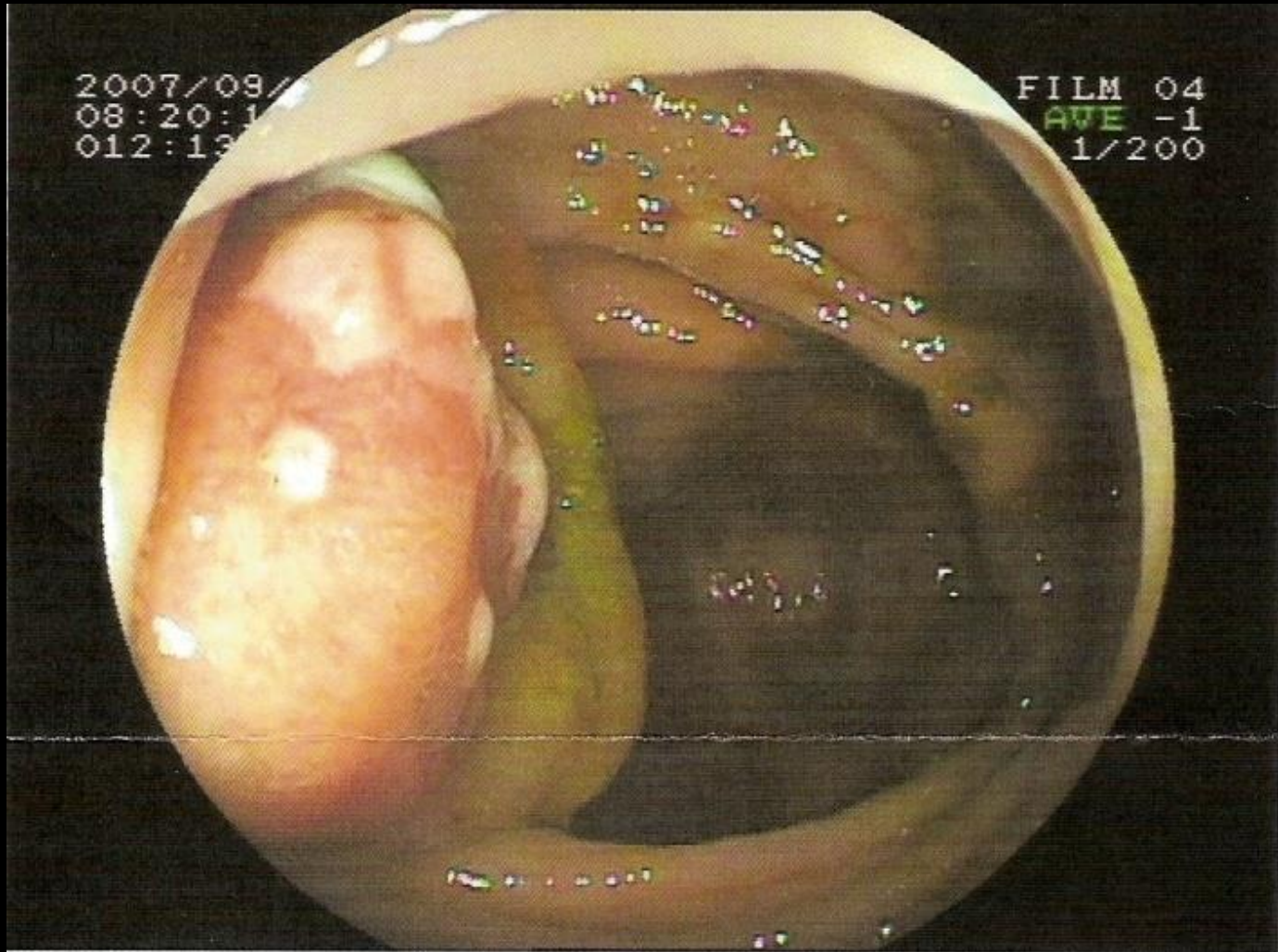


Tarmslyng





- Kikkertundersøgelse af mave-tarmkanalen + biopsi

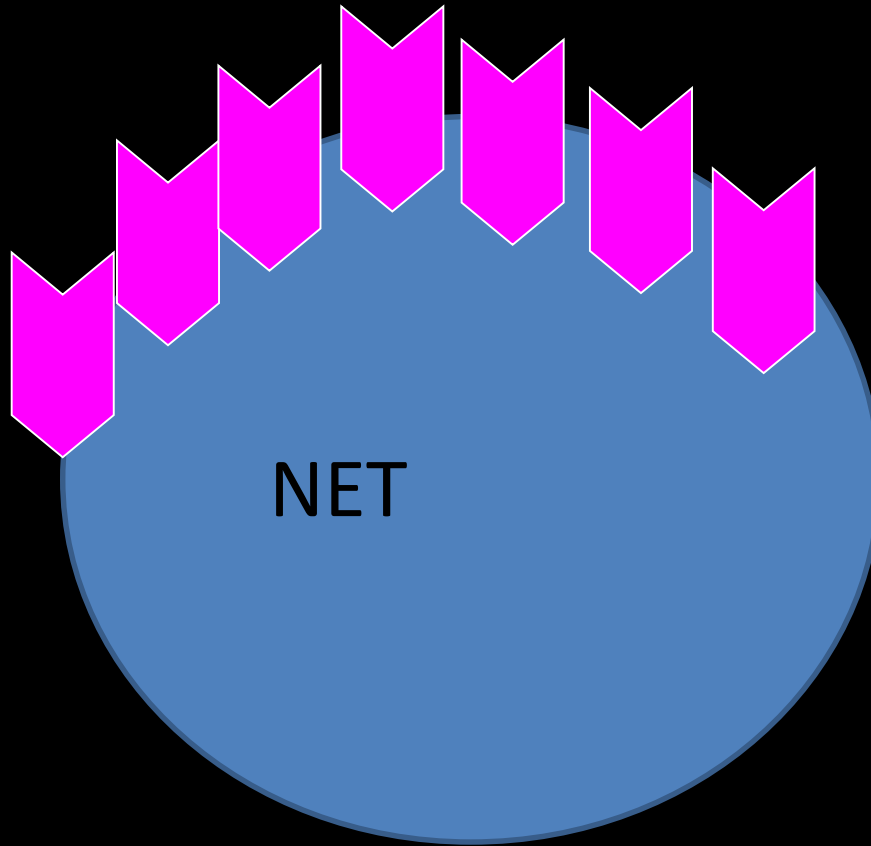


Hvad afgør behandling?

- Graden
 - Hvor hurtigt deler den sig
- Hvor udbredt er sygdommen (stadie)
 - Lokal spredning – lymfeknuder
 - Metastaser – lever, lunge, knogle

Stadie

Næsten alle NET (90%) har
somatostatin receptorer



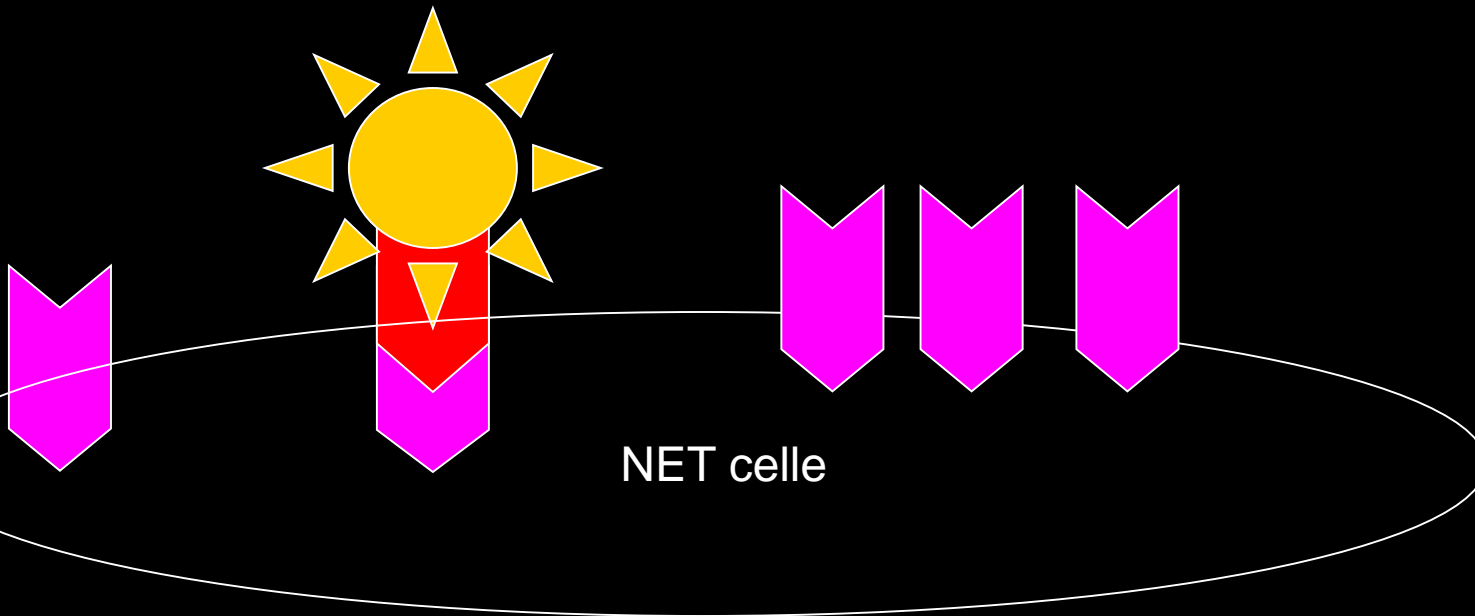
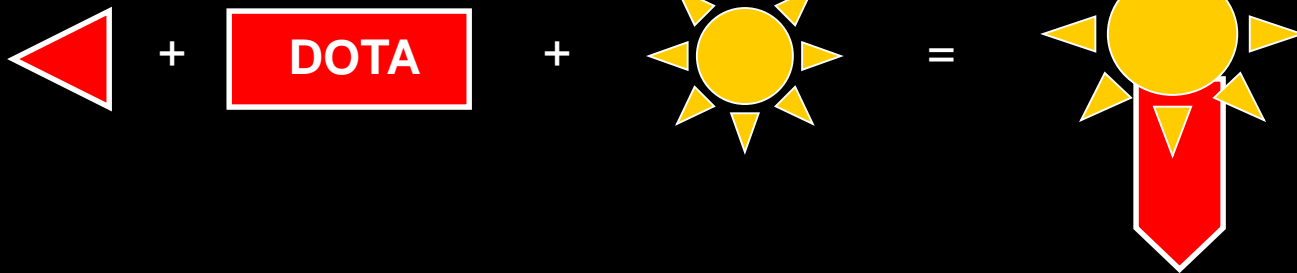
bruges til diagnostik og behandling

^{68}Ga -DOTA-TOC PET-CT

^{64}Cu -DOTA-TATE PET-CT

Somatostatin
receptor
peptide

Tracer (Gallium/kobber)

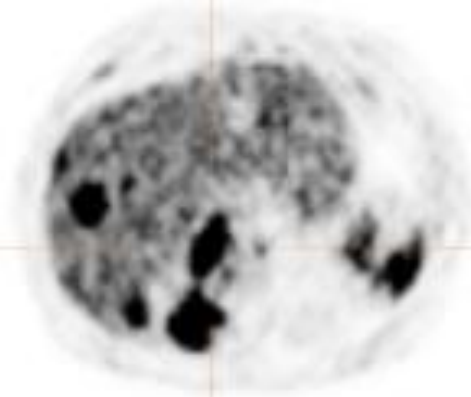




Left



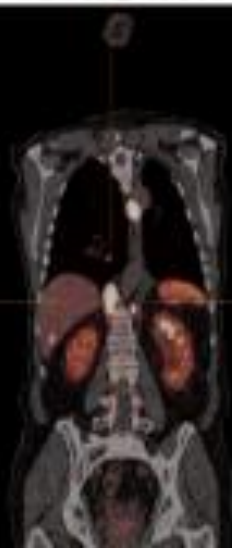
Posterior



Posterior

Left

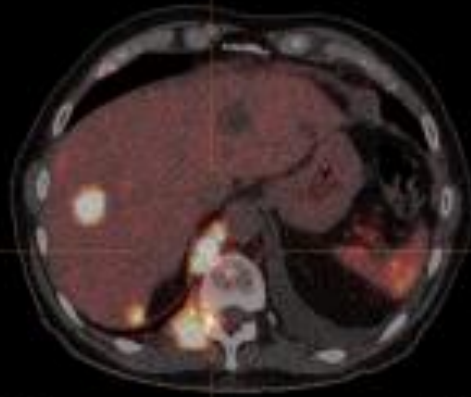
140101216
13000008
PET V88 - Correlated Trac II
Med Oct 25 2013 12:36:34



Left



Posterior



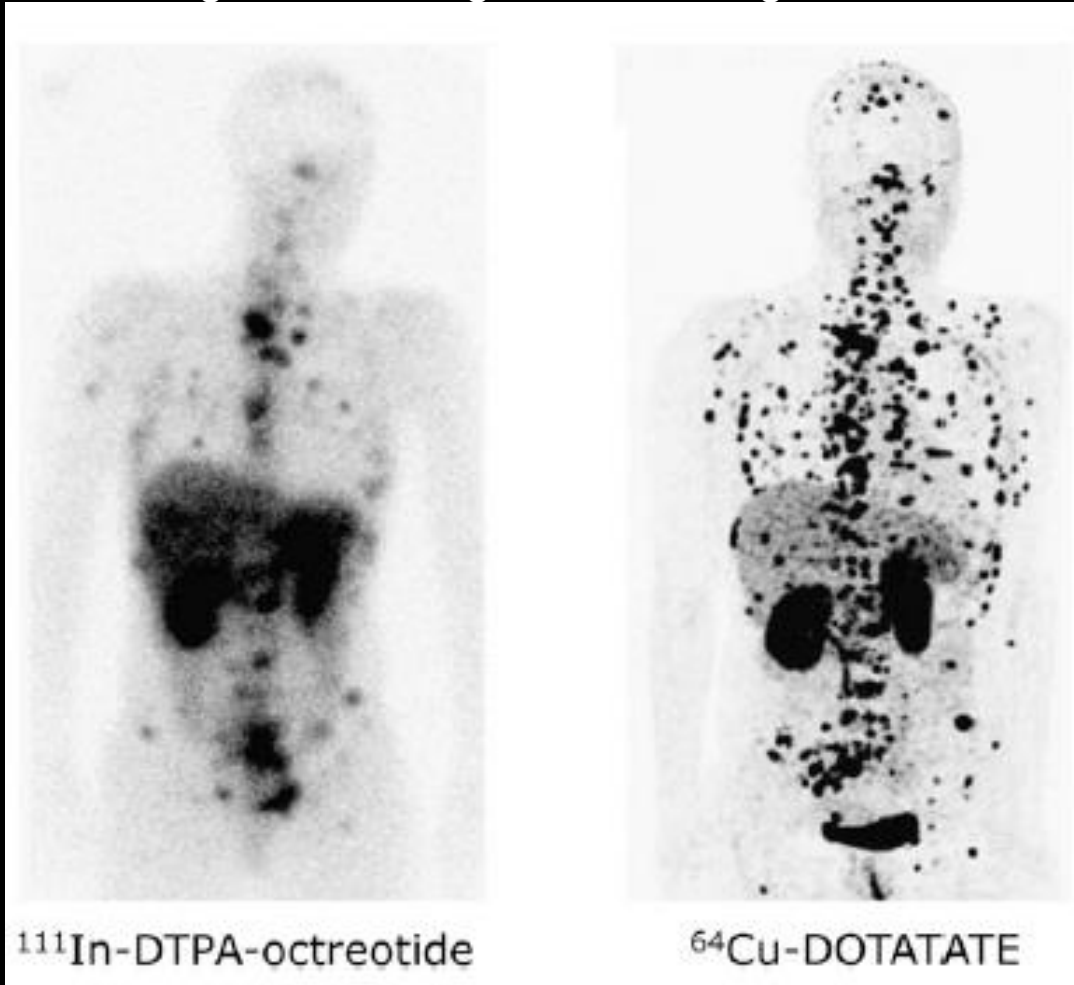
Left



Forbedret billed-diagnostik

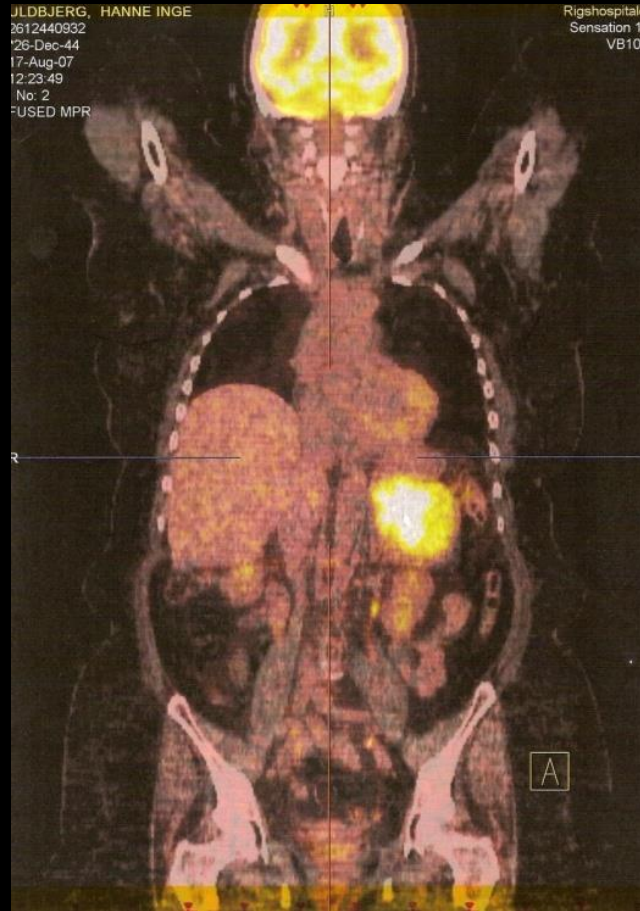
Samme patient

Undersøgelser foretaget med få dages mellemrum



FDG-PET CT-scanning

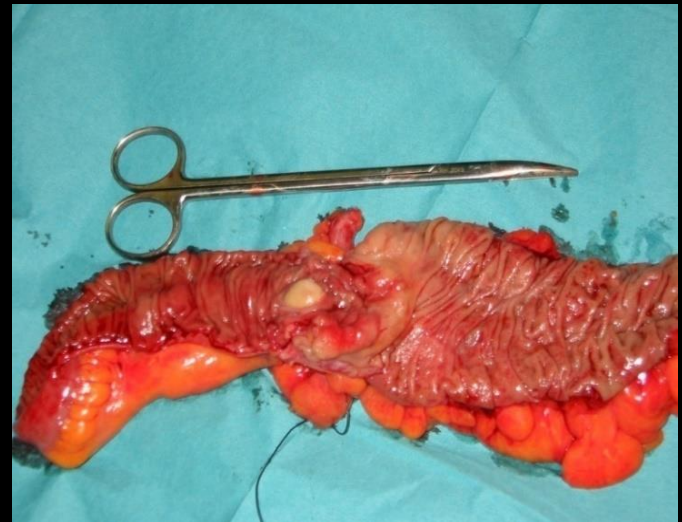
Hvis højt Ki-67 index

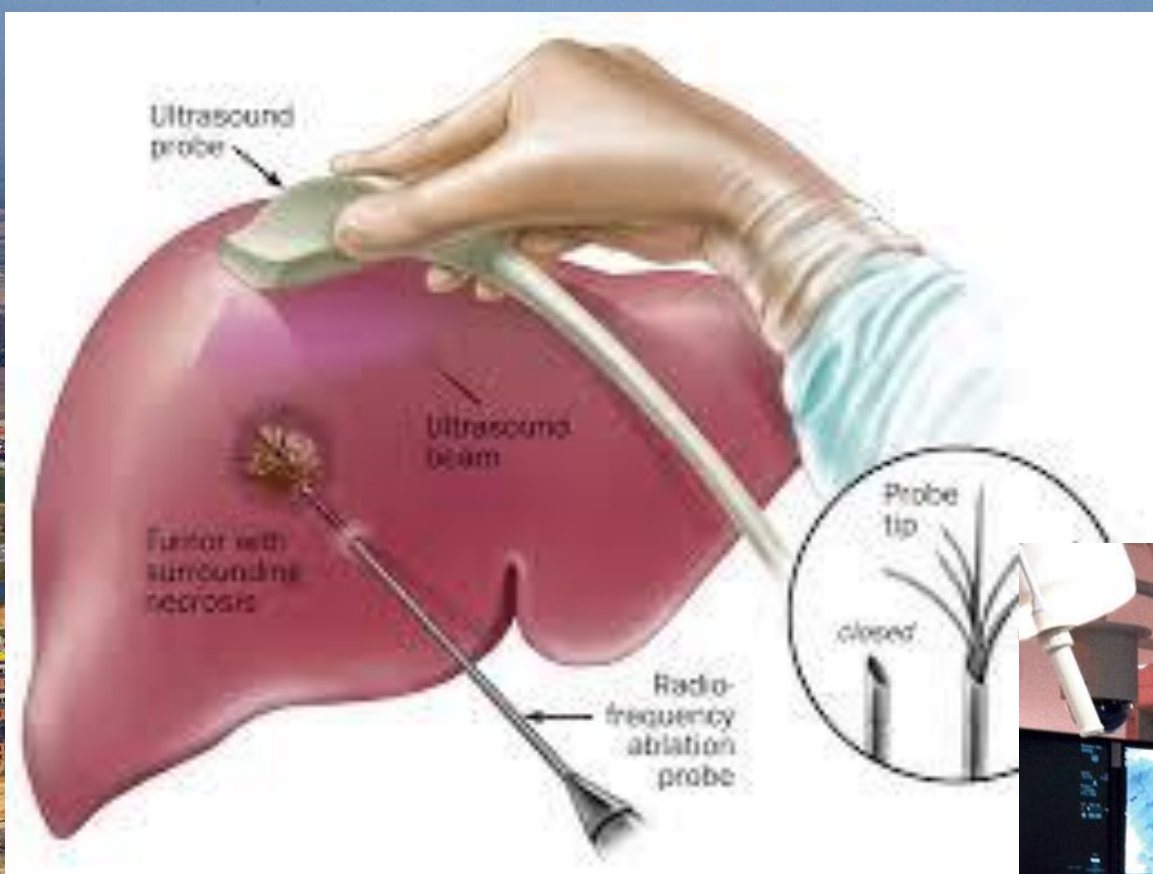


Behandling

Kirurgi:

- Eneste **helbredende** behandling
- Hvis muligt at helbrede så opererer vi
- Igen ved tilbagefald





Multidisciplinære team konferencer

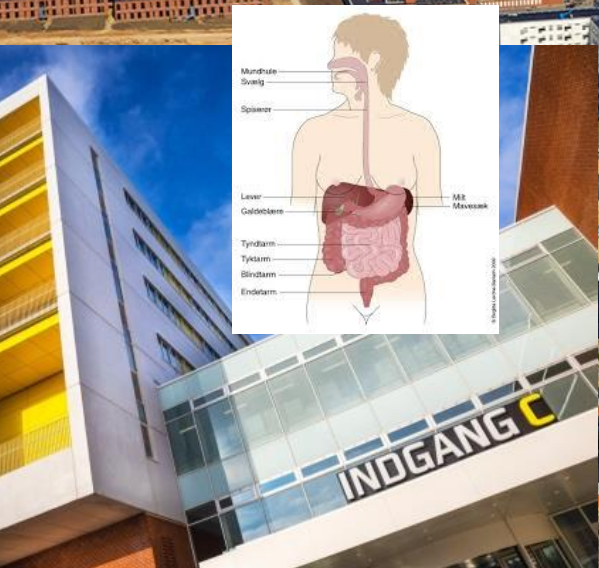
*Multi Disciplinary
Team Meeting*



- Alle nyhenviste NET patienter diskuteres på MDT



Hvem skal opereres
- hvad afhænger det af?



Alder



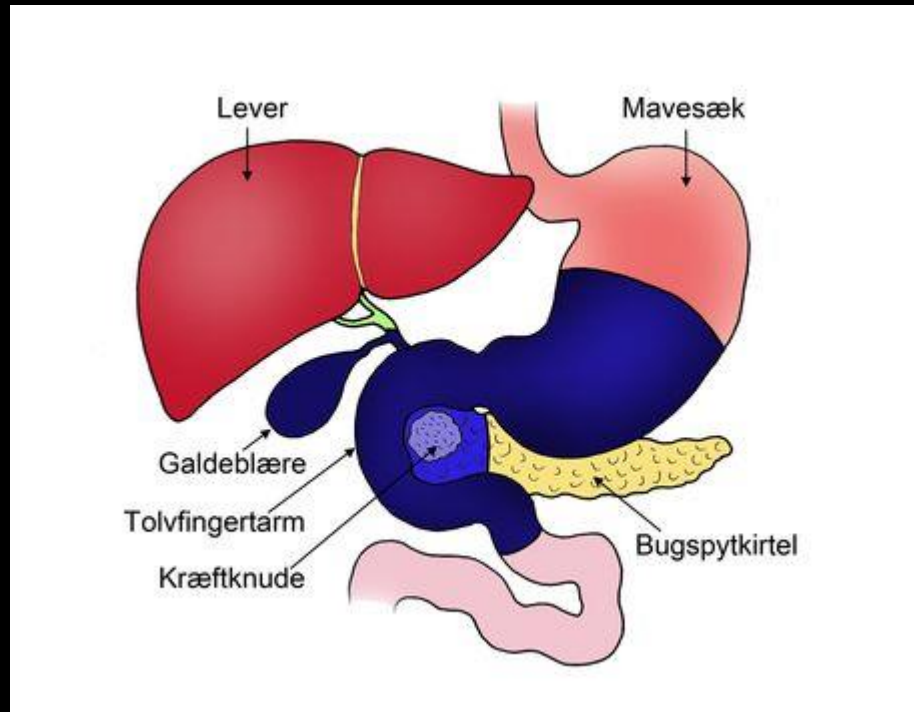
Performance status



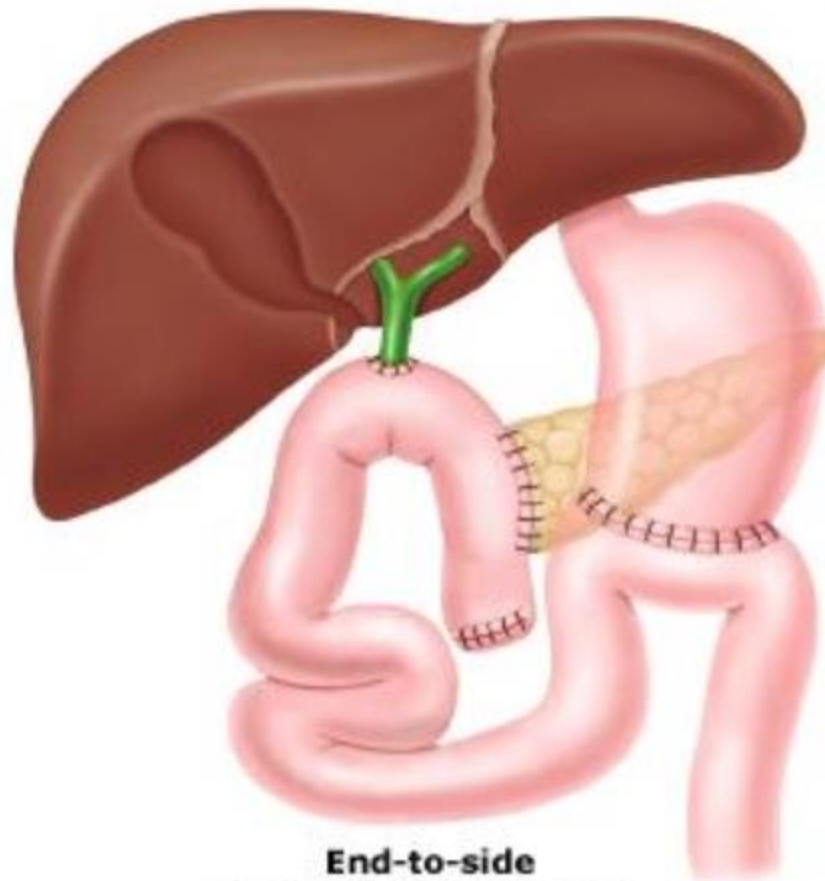
Behandlingsplan er individuel

- Kan tumor fjernes helt (karindvækst)
- Ingen gode studier har vist at det hjælper at fjerne noget af tumorbyrden
- Kan patienten tåle en operation
 - Andre sygdomme
- Alder og form
- Tumor grad -væksthastigheden

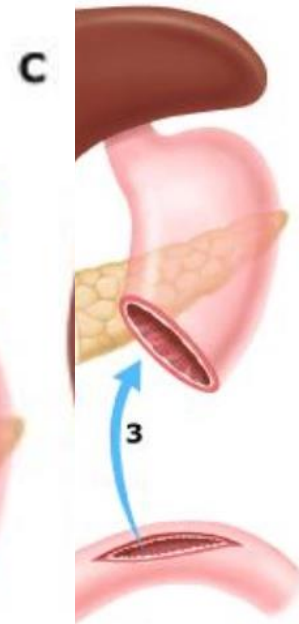
Tilfældige fund NET i bugspytkirtlen



Whipple



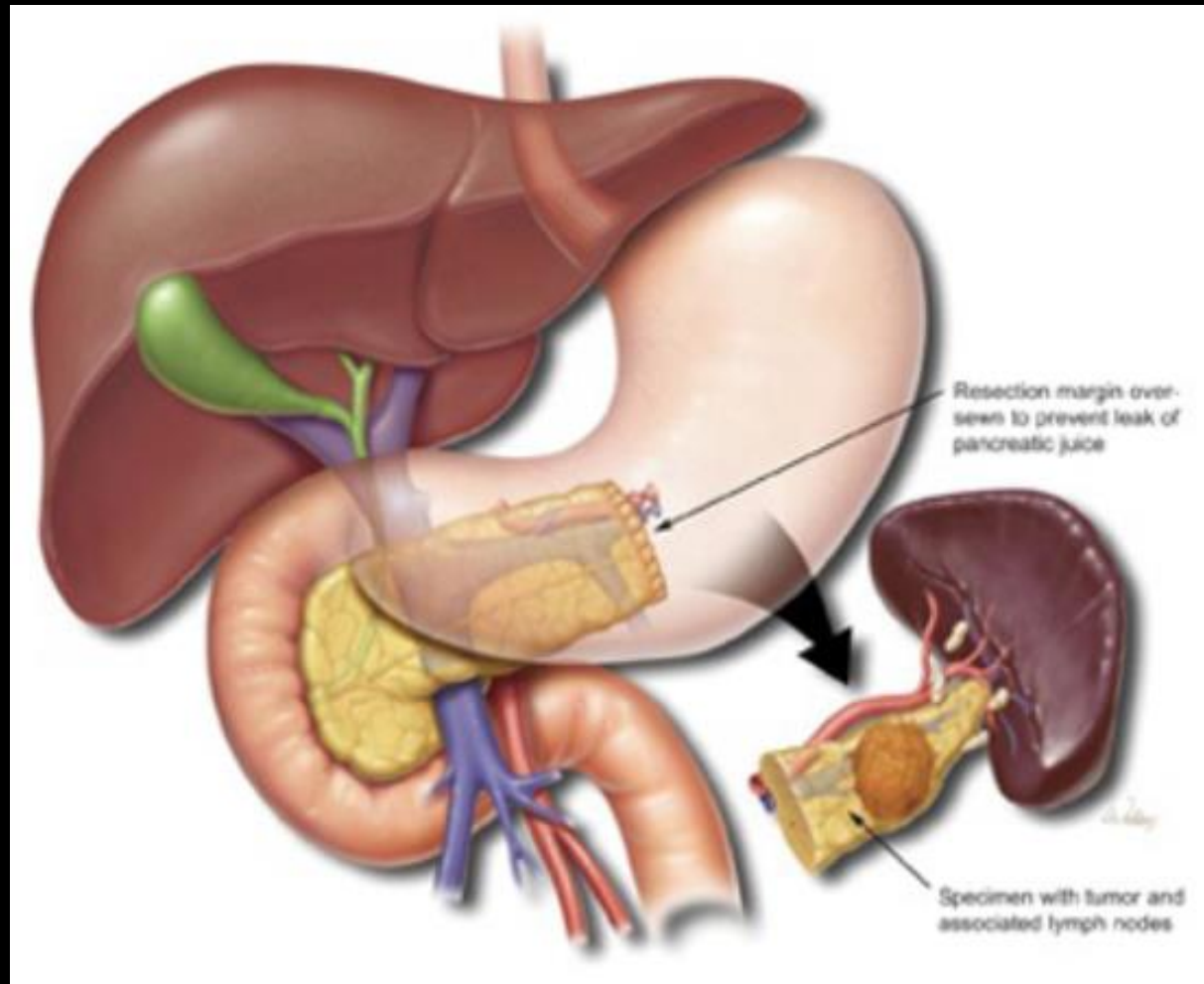
**End-to-side
pancreaticojejunostomy**



Senfølger/bivirkning

- Nedsat funktion af bugspytkirtlen (enzymtilskud)
 - Whipple 60-80 %
- Sukkersyge
- Kroniske mavesmerter
- Nedsat livskvalitet

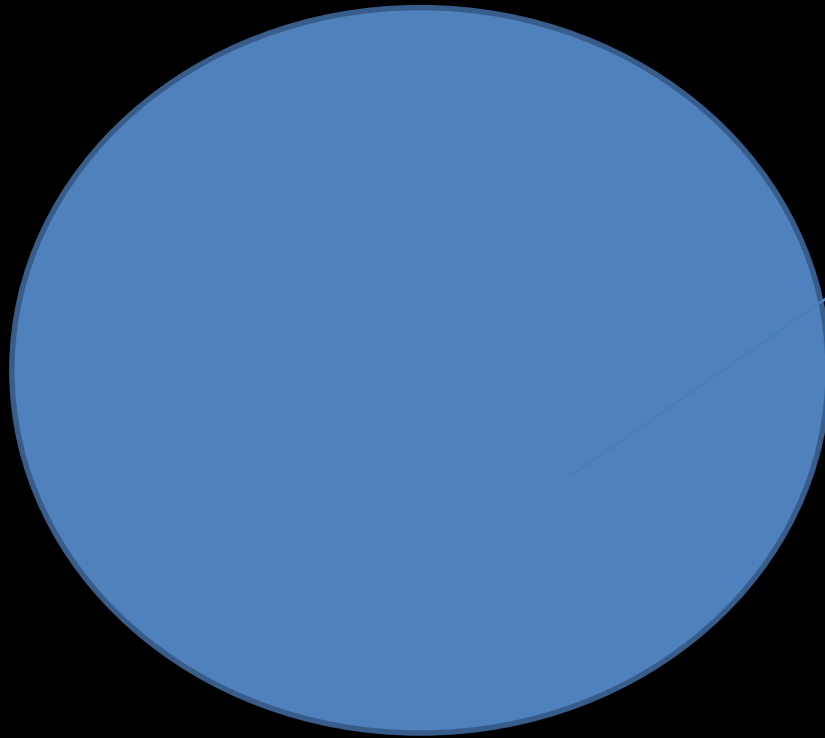
Halen fjernes



Ka jeg blive opereret og få fjernet noget af tumor?

- Hvis man har smerter (begyndende tarmslyng)
- Hvis man har mange hormon relaterede symptomer

NET producerer forskellige hormone (serotonin)



Serotonin:
diarre
flushing

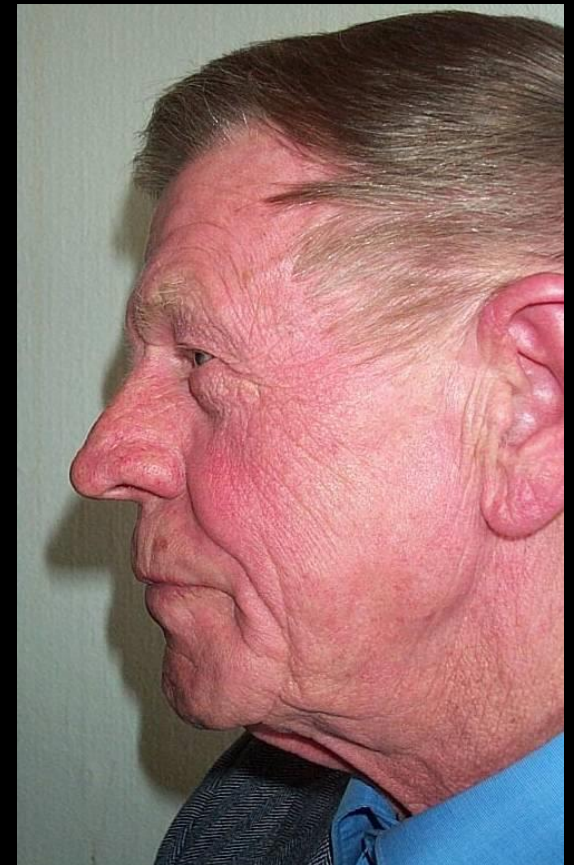
Flushing

Carcinoid syndrome

Facial flushing in a pt. with carcinoid syndrome



Flushing
acute attack



Tyndtarms NET Serotonin

Carcinoid syndrome

- Diarre
- Astma (<10%)
- Flushing

Hjertesvigt
Hjerteklapperne ødelægges
UL af hjerte!!

