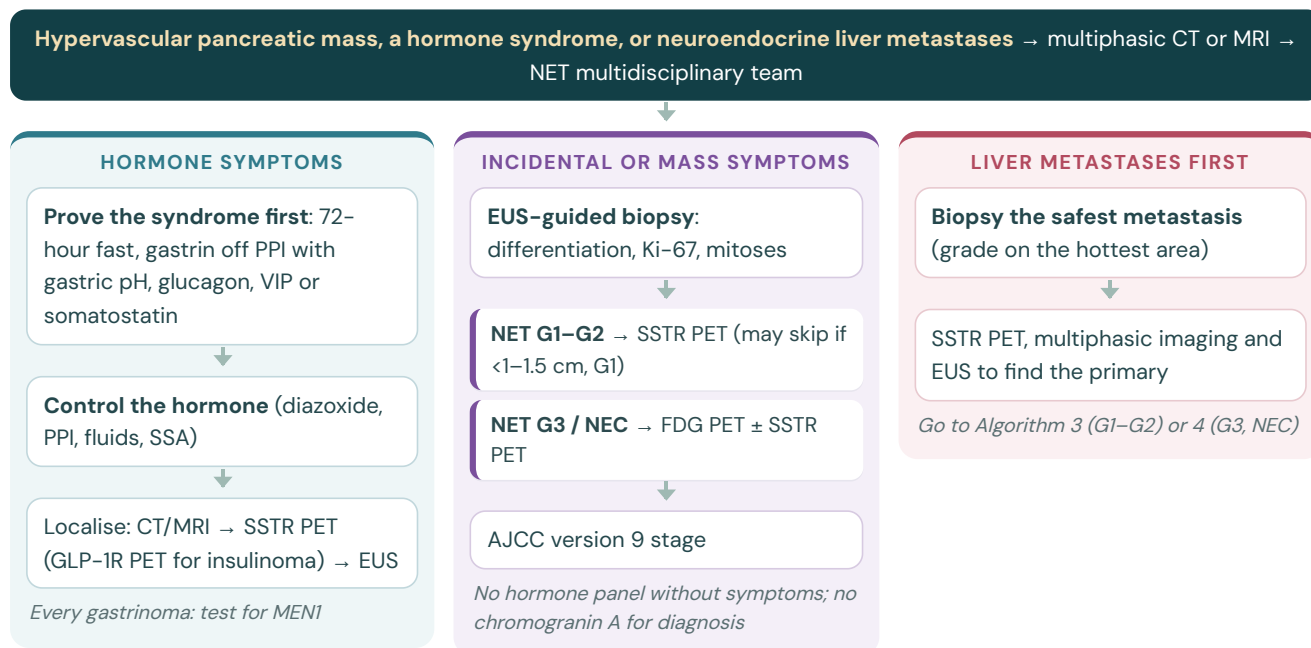


Pancreatic Neuroendocrine Tumours:

Suspected pancreatic NET: to a staged, graded diagnosis

Dr. Haritha Chiramana

MD, DM · Senior Medical
Oncologist & Hemato-
Oncologist



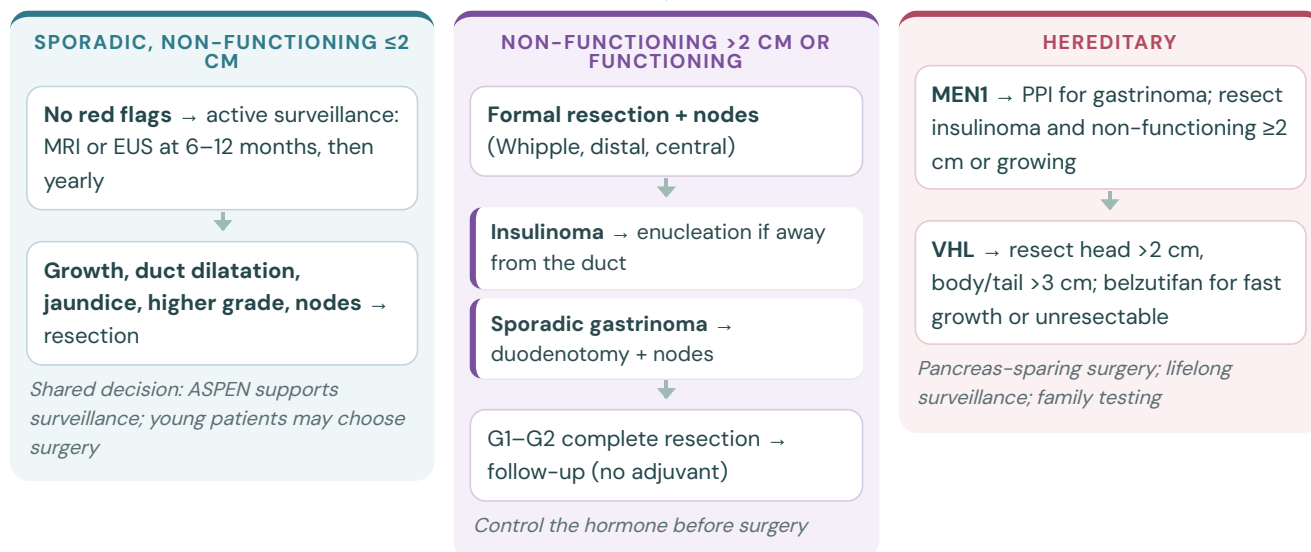
All patients: family history and germline testing when indicated (all gastrinomas, multiple tumours, consider under 50) · photograph and record the hormone symptoms · discuss in a NET multidisciplinary team.

Pancreatic Neuroendocrine Tumours: Localised disease: who needs an operation?

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No distant metastases → function, size, grade, duct and nodes, hereditary status → fitness and patient preference

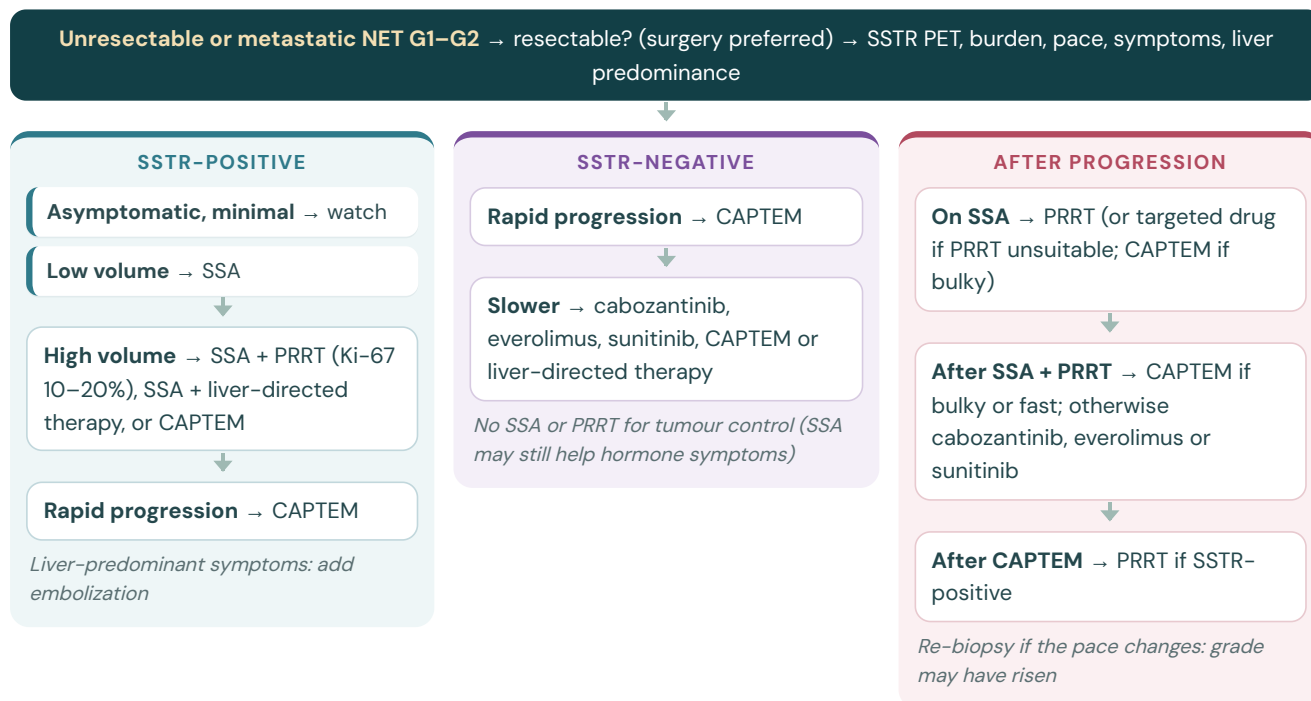


All patients: high-volume pancreatic surgeon · vaccines and fever plan if splenectomy · diabetes and digestion check after resection · follow-up for 10 years.

Pancreatic Neuroendocrine Tumours: Metastatic G1–G2 disease: what first, what next

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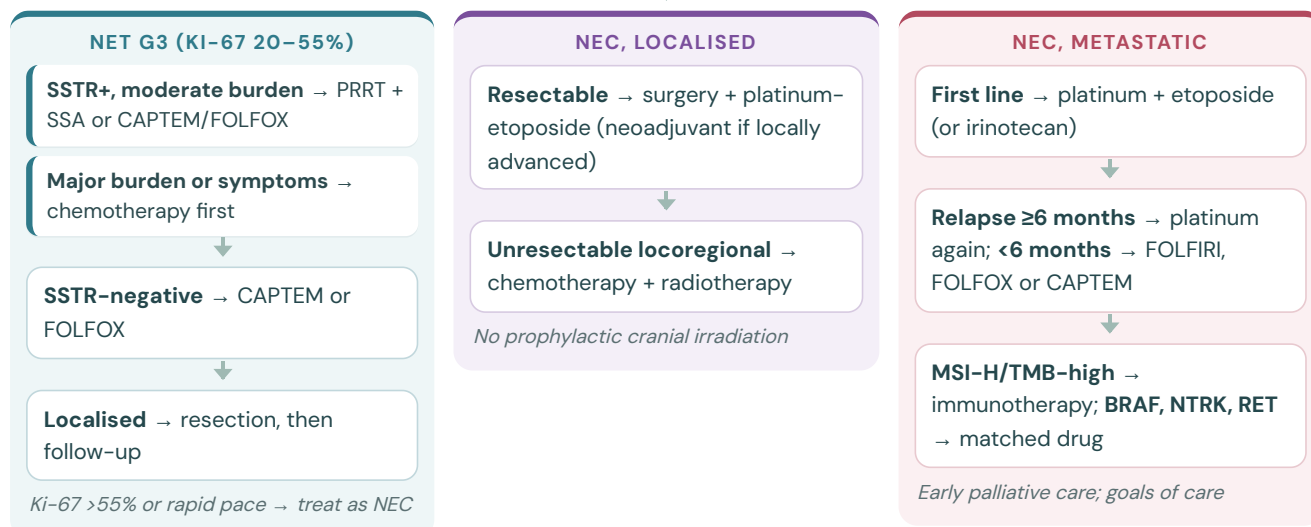
All patients: hormone control first · keep SSA after progression only in functioning tumours · CT/MRI every 3–6 months on treatment · trial at every line · bone and quality-of-life care.

Pancreatic Neuroendocrine Tumours: High-grade disease: NET G3 versus NEC

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Ki-67 over 20% → pathology review (morphology, p53, Rb, DAXX/ATRX) → SSTR and FDG PET → NGS



All patients: FDG PET before surgery for NEC · NGS on tissue (or ctDNA) · scans every 2–3 months on treatment · trial where available.

Pancreatic Neuroendocrine Tumours: Follow-up and survivorship plan

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A simple follow-up rhythm after resection of a pancreatic NET



Small tumours under surveillance: MRI or EUS at 6–12 months, then yearly while stable.

Do not use chromogranin A for routine follow-up after surgery (PPIs and many conditions raise it).

After distal pancreatectomy with splenectomy: vaccines and a fever plan; check glucose and digestion.

A simple follow-up rhythm, adapted from NCCN as quoted in the UpToDate functioning-tumour reviews: history, examination, marker if initially raised, and multiphasic imaging from 3–12 months, then every 6–12 months up to 10 years.

Keep the patient safe

- Control the hormone before any procedure
- Insulinoma: glucose at hand, frequent meals
- Gastrinoma: never stop the PPI on your own
- VIPoma: fluids and potassium first
- Carry a treatment summary card

Red flags to report

- Confusion, sweating or fits when fasting
- Black stools, vomiting blood, severe ulcer pain
- Watery diarrhoea with dizziness or weakness
- Fever or breathlessness on everolimus
- New jaundice or rapidly growing liver

Do not forget

- Imaging every 6–12 months up to 10 years
- No chromogranin A for routine follow-up
- Counts and kidney tests after PRRT
- MEN1/VHL: lifelong programme, family testing
- Vaccines after splenectomy

When relapses happen: slow disease, many options

Relapse can come 5–10 years after surgery, most often in the liver. Grade at relapse may be higher than at diagnosis.

Oligometastatic liver relapse

- Re-resection or ablation
- SSTR PET first: find all disease
- Then follow up as before

Wider relapse, slow

- Watch if asymptomatic, low volume
- SSA if SSTR-positive
- PRRT after SSA progression

Faster than expected

- Re-biopsy: Ki-67, differentiation
- FDG PET: aggressive clones
- CAPTEM, or NEC-type treatment

A rising marker alone does not justify new treatment: confirm progression on imaging. Clinical trials and a specialist NET multidisciplinary team should be offered at every relapse.

When relapses happen. Options follow the systemic-therapy and liver-directed algorithms; grade migration at relapse is described in the G3 and pathology reviews.