Table 1. Methods of management of insulinoma associated hypoglycemia. TAE - trans-arterial embolization, TACE - trans-arterial chemoembolization, SIRT - selective internal radiation therapy, PRRT - peptide receptor radionuclide therapy

Management of insulinoma associated hypoglycemia

In all patients

Education of patient and his/her relatives (recognition and reacting to hypoglycemic symptoms)

Lifestyle modification (frequent meals rich in complex carbohydrates at regular intervals, avoiding driving and excessive exercise)

Treatment of hypoglycemia

Mild hypoglycemia/conscious patients: 15 to 20 grams of glucose or fast-acting carbohydrate meal/drink every 15 minutes until restoration of euglycemia, subsequent ingestion of meal rich in complex carbohydrates

Severe hypoglycemia/unconscious patients: 25 gram boluses of 50% glucose every 15 minutes until restoration of euglycemia; in the event of lack of IV access, 1 mg of glucagon i.m. or s.c.

Recurrent hypoglycemia: IV infusion of 10% or 20% glucose or enteral nocturnal feeding

Prevention of hypoglycemia

Benign tumors	**Malignant tumors**
• Diazoxide – 3-8 mg/kg/day in 2-3 doses (start with 150-200 mg, increase to appropriate dose) • Somatostatin analogs: - consider using somatostatin receptor scintigraphy to choose patients who will benefit most - start with short-acting s.c. form of octreotide 100-600 µg/day in 2-4 doses for 2 weeks, continue for 2 weeks after the first dose of long-acting form (start with 100-200 µg, increase to appropriate dose; observe in hospital) - if response is appropriate, consider long-acting forms: octreotide 20-30 mg i.m. every 4 weeks *or* lanreotide 30 mg i.m. every 2 weeks *or* lanreotide 60-120 mg s.c. every 4 weeks	• Somatostatin analogs: - consider using somatostatin receptor scintigraphy to choose patients who will benefit most - start with short-acting s.c. form of octreotide 100-600 µg/day in 2-4 doses for 2 weeks, continue for 2 weeks after the first dose of long-acting form (start with 100-200 µg, increase to appropriate dose; observe in hospital) - if response is appropriate, use long-acting forms: octreotide 20-30 mg i.m. every 4 weeks *or* lanreotide 30 mg i.m. every 2 weeks *or* lanreotide 60-120 mg s.c. every 4 weeks • Everolimus – 10 mg/day - if not well tolerated – use 5 mg/day - if loss of response – consider discontinuation and re-administration
Aim for treatment of choice – surgery	Consider cytoreductive methods – debulking surgery, liver metastases cytoreductive therapies (TAE, TACE, SIRT), chemotherapy and PRRT

In case of problems in maintaining blood glucose levels – consider use of continuous glucose monitoring systems.
In rare cases of inefficiency of standard pharmacotherapy and other techniques for hypoglycemia management – carefully consider use of other hypoglycemic drugs – glucocorticoids, beta blockers, phenytoin or calcium channel inhibitors.