INTESTINE, INTESTINE/LIVER TRANSPLANTATION
PATIENT SELECTION CRITERIA

These criteria are used as guidelines for referral for transplant evaluation and are not intended as an automatic inclusion or exclusion of a candidate for referral. Intestinal Transplantation alone may be considered for selected pediatric and adult patients with Short Bowel Syndrome and/or intestinal failure who require chronic Total Parenteral Nutrition (TPN) and have severe complications that lead to serious morbidity and could lead to mortality. Combined Intestinal/Liver Transplantation may be considered in selected pediatric and adult Patient’s with Short Bowel syndrome and irreversible progressive chronic liver disease when there is no prospect for prolonged survival with conventional therapy. The following are current, generally accepted, criteria for Intestinal Transplantation.

1. INDICATIONS
1.1. Intestinal Transplant
1.1.1. Pediatric or adult patients with irreversible Short Bowel Syndrome or intestinal failure, who have severe complications of TPN, including, but not limited to the following:
1.1.1.1 Lack of vascular access
1.1.1.2 Recurrent central venous catheter-related infections
1.1.1.3 Metabolic bone disease
1.1.1.4 Evidence of severe or progressive hepatic dysfunction
1.2. Combined intestinal-liver transplant.
1.2.1. Adult and pediatric patients with Short Bowel Syndrome and/or intestinal failure and irreversible progressive chronic liver disease.

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i May be due, but not necessarily limited, to the following examples:
1. Volvulus
2. Atresia
3. Necrotizing Enterocolitis
4. Crohn’s Disease
5. Gastrochisis
6. Superior Mesenteric Artery Thrombosis
7. Trauma
2. CONTRAINDICATIONS

2.1. Advanced cardiopulmonary disease or any other life limiting disorders, excluding hepatopulmonary syndrome.

2.2. Inability to accept the procedure, understand its nature, or cooperate with the treatment protocol.

2.3. Patients with HCC, who exceed Region 5ii/UCSFiii criteria, should not be sent for intestinal transplant evaluation at this time because they are not medically appropriate.

2.4. Irreversible brain damage or significant neurologic dysfunction.

2.5. Psycho-social behavioral and support issues, such as:

2.5.1. Active alcohol and/or substance abuse: Patients must be free for six (6) months from alcohol and other substance abuse and have been evaluated by a substance abuse program. Exceptions may be made on a case-by-case basis. Such patients shall have been evaluated and cleared by a substance abuse program. The risk of recidivism, which has been documented to negatively impact transplant outcomes, must be addressed and considered to be lowiv, v vi

2.5.2 Active nicotine abusevii.

2.5.3 Lack of an adequate support system provided by family, friends, or others to support the patient before, during, and after the transplant process.

2.5.4 Patients must have an adequate support system and a record of adherence to medical treatment. Additionally, patients must be willing to travel on short notice to the transplant center for transplant and any subsequent complications.

2.5.5 Active psychological and/or psychiatric conditions that have been evaluated by a mental health professional and found to render the patient unsuitable for transplantation.

2.5.6 Demonstrated lack of compliance with a complex medical regimen, as evidenced by failure to keep appointment, failure to make steady progress in completing pre-transplant evaluation testing, non-adherence to medication regimens or failure to adhere to testing required for maintenance on the waiting list.

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ii The Region 5 criteria for intestinal patients with HCC is 1 tumor ≤5 cm or 2 – 3 lesions, none >3 cm and no vascular invasion. NEJM 1996, 334: 633-699.

iii The UCSF criteria for intestinal patients with HCC is 1 tumor ≤6.5 cm, or 2 – 3 lesions, none >4.5 cm and total tumor diameter ≤8 cm, and no vascular invasion. Hepatology, 2001, 33: 1394-1403.

iv Liver Transplantation 2006, 12:813-820. Alcohol consumption patterns and predictors of use following liver transplantation for alcoholic liver disease.


vi Alcohol abstinence prior to liver transplantation for Alcoholic Liver Disease (G110807), TPMG New Medical Technology.

3. RELATIVE CONTRAINDICATIONS

3.1. Relative contraindications include, but not necessary limited to:
3.1.1. Renal Failure (excluding hepatorenal syndrome)
3.1.2. Portal Vein thrombosis
3.1.3. Active infection outside the hepatobiliary system
3.1.4. Advanced malnutrition
3.1.5. Severe diabetic complications
3.1.6. Multiple abdominal surgeries
3.1.7. 
3.1.8. Active infection or high risk of reactivation of previous infection.
3.1.9. Patients with a history of malignancy, with a moderate to high risk of recurrence (as determined after consultation with oncologist considering tumor type, response to therapy, and presence or absence of metastatic disease) may be unsuitable candidates for transplantation. Patients with low risk of recurrence may be considered.