Quantitative Angiography

A new frontier in hepatic intervention

Sarvesh Periyasamy: Slam!
The Burden of Liver Cancer

6th most common cancer
4th most common cause of cancer death
2nd most deadly among all cancers

Alcoholism  Fatty liver disease  Hepatitis B, C

Only 15% of patients are surgical candidates

Surgical Resection  Transplantation

Villanueva, NEJM 2019
Liver Embolization

There is no **objective** measure for when to end an embolization procedure.
Measuring Blood Flow from Images

velocity = \text{distance} / \text{time}

pulse
calculated velocity

distance
time of travel

velocity = \text{distance} / \text{time}

Degree of Embolization

- insufficient tumor necrosis
- increased damage to healthy tissue