

## Arresting Aneurysm Progression (AAA) (Yissum)

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## A Minimally Invasive, Laser-Based Therapeutic Approach

<b>Category</b>	Abdominal Aortic Aneurysm (AAA)
<b>Development Stage</b>	In-vitro studies show that LLLI inhibits processes central to the pathogenesis of aneurysm
<b>Patent Status</b>	Patent Pending
<b>Market Size</b>	The worldwide AAA market is valued at \$1-1.2B annually.

### Highlights

- A Low Level Laser Irradiation (LLLI) addresses the need for improved therapy for AAA, a leading cause of death in the USA, accounting for more than 15,000 deaths every year.
- The LLLI enhances thickening of the arterial wall, thus reducing the risk of aneurysm rupture.
- As published in *Lasers in Surgery and Medicine* (38:779-786, 2006), in-vitro studies by Prof. Gertz's group showed that LLLI stimulates smooth muscle cell proliferation, stimulates collagen synthesis, modulates the equilibrium between regulatory matrix remodeling enzymes, and inhibits pro-inflammatory IL-1-b gene expression.

### Our Innovation

- A novel, minimally invasive procedure for arresting progression of AAA.
- The laser irradiation therapy will be applied through a laparoscopic procedure.
- The LLLI offers a new alternative for high risk patients, avoiding most complications of currently available treatments, and may shorten hospitalization time.


### Development Milestones

- 12-18 months animal study of small (80) and large (20) animals with AAA in-vivo model.
- Development of the LI-LAP catheter for laparoscopic procedures
- Clinical studies of the proposed procedure are planned for end of 2008

### The Opportunity

- Every year, 250,000-300,000 patients are diagnosed with AAA in the US alone.
- 40,000 of these patients are treated with endovascular stenting or open AAA surgery.
- The proposed procedure will offer a less invasive alternative to all surgical patients suffering from AAA, and will provide the sole alternative to high-risk patients.

### Contact for more information:

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