

# Clinical trials of spinal cord stimulation for stable angina in patients with severe/refractory angina pectoris

TrialResults-center [www.trialresultscenter.org](http://www.trialresultscenter.org)

## 1 spinal cord stimulation

Trial	Treatments	Patients	Trials design and methods
<b>spinal cord stimulation vs no spinal cord stimulation</b>			
de Jongste , 1994 n=8/9 follow-up: 8 weeks	spinal cord stimulation versus control	patients with intractable angina pectoris	Parallel groups open
Lanza , 2005 n=10/10 follow-up: 8 mo (median)	spinal cord stimulation versus no spinal cord stimulation	patients with cardiac syndrome X	Cross over open
<b>spinal cord stimulation vs placebo</b>			
Eddicks , 2007 n=12/12 follow-up: 4 weeks	Spinal cord stimulation versus placebo	patients with refractory angina	Cross over double blind
<b>spinal cord stimulation vs coronary artery bypass grafting</b>			
ESBY , 1998 n=53/51 follow-up: 6 mo (2y)	Spinal cord stimulation versus coronary artery bypass grafting	patients with severe angina pectoris	Parallel groups open
<b>spinal cord stimulation vs percutaneous myocardial laser revascularization</b>			
SPiRiT , 2006 n=34/34 follow-up: 12 mo	spinal cord stimulation versus percutaneous myocardial laser revascularization	Subjects with Canadian Cardiovascular Society class 3/4 angina and reversible perfusion defects	open

## References

### de Jongste , 1994:

de Jongste MJ, Hautvast RW, Hillege HL, Lie KI Efficacy of spinal cord stimulation as adjuvant therapy for intractable angina pectoris: a prospective, randomized clinical study. Working Group on Neurocardiology. J Am Coll Cardiol 1994;23:1592-7 [8195519]

Jessurun GA, DeJongste MJ, Hautvast RW, Tio RA, Brouwer J, van Lelieveld S, Crijns HJ Clinical follow-up after cessation of chronic electrical neuromodulation in patients with severe coronary artery disease: a prospective randomized controlled study on putative involvement of sympathetic activity. Pacing Clin Electrophysiol 1999;22:1432-9 [10588144]

### Lanza, 2005:

Lanza GA, Sestito A, Sgueglia GA, Infusino F, Papacci F, Visocchi M, Ierardi C, Meglio M, Bellocchi F, Crea F Effect of spinal cord stimulation on spontaneous and stress-induced angina and 'ischemia-like' ST-segment depression in patients with cardiac syndrome X. Eur Heart J 2005;26:983-9 [15642701]

### Eddicks, 2007:

Eddicks S, Maier-Hauff K, Schenk M, Mller A, Baumann G, Theres H Thoracic spinal cord stimulation improves functional status and relieves symptoms in patients with refractory angina pectoris: the first placebo-controlled randomised study. Heart 2007;93:585-90 [17237126]

**ESBY, 1998:**

Mannheimer C, Eliasson T, Augustinsson LE, Blomstrand C, Emanuelsson H, Larsson S, Norrsell H, Hjalmarsson A Electrical stimulation versus coronary artery bypass surgery in severe angina pectoris: the ESBY study. *Circulation* 1998;97:1157-63 [[9537342](#)]

Andrill P, Ekre O, Eliasson T, Blomstrand C, Brjesson M, Nilsson M, Mannheimer C Cost-effectiveness of spinal cord stimulation versus coronary artery bypass grafting in patients with severe angina pectoris—long-term results from the ESBY study. *Cardiology* 2003;99:20-4 [[12589118](#)]

Norrsell H, Pilhall M, Eliasson T, Mannheimer C Effects of spinal cord stimulation and coronary artery bypass grafting on myocardial ischemia and heart rate variability: further results from the ESBY study. *Cardiology* 2000;94:12-8 [[11111139](#)]

Ekre O, Eliasson T, Norrsell H, Whrborg P, Mannheimer C Long-term effects of spinal cord stimulation and coronary artery bypass grafting on quality of life and survival in the ESBY study. *Eur Heart J* 2002;23:1938-45 [[12473256](#)]

**SPIRIT, 2006:**

McNab D, Khan SN, Sharples LD, Ryan JY, Freeman C, Caine N, Tait S, Hardy I, Schofield PM An open label, single-centre, randomized trial of spinal cord stimulation vs. percutaneous myocardial laser revascularization in patients with refractory angina pectoris: the SPiRiT trial. *Eur Heart J* 2006;27:1048-53 [[16554313](#)]

## 2 About TrialResults-center.org

TrialResults-center is an innovative knowledge database that collects the results of RCTs and provides dynamic interactive systematic reviews and meta-analysis in the field of all major heart and vessels diseases.

The TrialResults-center database provides a unique view of the treatment efficacy based on all data provided directly from clinical trial results, offering a valuable alternative to personal bibliographic search, published meta-analysis, etc. Furthermore, it would allow comparing easily the various concurrent therapeutic for the same clinical condition.

Rigorous meta-analysis method is used to populate TrialResults-center: widespread search of published and non published trials, study selection using pre-specified criteria, data extraction using standard form.

TrialResults-center is continually updated on a weekly basis. We continually search all new results (whatever their publication channel) and these news results are immediately added to the database with a maximum of 1 week.

TrialResults-center is non-profit and self-funded.