

# Clinical trials of cholesterol lowering intervention for cardiovascular prevention in patients with LDL elevation and without CHD

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## 1 diet

| Trial   | Treatments  | Patients   | Trials design and methods  |
|---|---|--|--|
| <b>diet vs usual diet</b>   |   |  |  |
| Finnish Mental Hospital (Miettinen) , 1985<br>n=612/610<br>follow-up: 6.0 years | cholesterol-lowering diet (low in saturated fats and cholesterol and relatively high in polyunsaturated fats)<br>versus<br>usual diet | middle-aged institutionalized women without CHD                  | Cluster-randomized cross-over<br>open, blind assessment<br>Finland |
| Goteborg , 1986<br>n=10004/20028<br>follow-up: 10 years                         | multifactorial intervention programme<br>versus<br>no intervention  | men, 47-55 years old at entry                                    | Parallel groups<br>open<br>Sweden                                  |
| Hjermann , 1981<br>n=604/628<br>follow-up: 6.5 years                            | diet<br>versus<br>usual diet  | healthy, normotensive men at high risk of coronary heart disease | Parallel groups<br>open<br>Sweden                                  |
| MRFIT , 1982<br>n=6428/6438<br>follow-up: 6.5 y                                 | multifactor intervention program<br>versus<br>usual diet  | high-risk men aged 35 to 57 years                                | Parallel groups<br>open  |
| Veterans Ad. (Dayton) , 1969<br>n=424/422<br>follow-up: 3.6 and 8 y             | cholesterol lowering diet<br>versus<br>usual diet   | men in domiciliary care, age>55, with or without CHD             | Parallel groups<br>double blind<br>USA                             |
| WHO Collaborative , 1986<br>n=30489/26971<br>follow-up: 5.5 years               | multifactorial prevention<br>versus<br>usual diet   | middle-aged men  | Parallel groups<br>open<br>Belgium, Italy, Poland, UK              |

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## 2 fibrates

| Trial  | Treatments                                    | Patients  | Trials design and methods  |
|--|---|---|--|
| <b>clofibrate vs placebo</b>                               |   |   |  |
| Cullen , 1974<br>n=20/20<br>follow-up: 2 years             | clofibrate<br>versus<br>placebo               |   | Parallel groups  |
| <b>WHO clofibrate , 1978</b>                               |   |   |  |
| n=5331/5296<br>follow-up: 5.3 years                        | clofibrate 1.6 g daily<br>versus<br>olive oil | primary prevention, Hommes, de 30 - 59 ans  | Parallel groups<br>double blind<br>Scotland, Hungary, Czech Republic |
| <b>gemfibrozil vs placebo</b>                              |   |   |  |
| Helsinki (HHS) , 1987<br>n=2046/2035<br>follow-up: 5 years | gemfibrozil 1,2 g/d<br>versus<br>placebo      | asymptomatic middle-aged men (40 to 55 years of age) with primary dyslipidemia (non-HDL cholesterol greater than or equal to 200 mg per deciliter [5.2 mmol per liter]) | Parallel groups<br>double blind<br>Finland                           |

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### 3 inhibitor of lipoprotein-associated phospholipase

| Trial                        | Treatments | Patients | Trials design and methods |
|------------------------------|------------|----------|---------------------------|
| <b>darapladib vs placebo</b> |            |          |                           |
| SOLID-TIMI 52                | -          | -        |                           |
| [NCT01000727]                |            |          |                           |
| n=NA                         |            |          |                           |
| follow-up:                   |            |          |                           |

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### 4 Probucol

| Trial                           | Treatments                                  | Patients   | Trials design and methods        |
|---------------------------------|---|--|----------------------------------|
| <b>probucol vs control</b>      |   |  |                                  |
| FATS Fukosawa (probucol) , 2002 | probucol 500 mg/day<br>versus<br>diet alone | asymptomatic patients with<br>hypercholesterolemia | Parallel groups<br>open<br>Japan |
| n=82/81                         |   |  |                                  |
| follow-up: 2 years              |   |  |                                  |

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### 5 resins

| Trial                            | Treatments | Patients | Trials design and methods |
|----------------------------------|------------|----------|---------------------------|
| <b>cholestyramine vs placebo</b> |            |          |                           |
|                                  |            |          | continued...              |

| Trial   | Treatments   | Patients  | Trials design and methods              |
|---|--|---|--|
| <b>LRC , 1984</b><br>n=1906/1900<br>follow-up: 7.4 years        | cholestyramine 24 g daily<br>versus<br>placebo         | asymptomatic middle-aged men with primary hypercholesterolemia (type II hyperlipoproteinemia) | Parallel groups<br>double blind<br>USA |
| <b>colestipol vs placebo</b>                                    |  |   |  |
| <b>Gundersen , 1976</b><br>n=36/30<br>follow-up: 0.8 years      | colestipol 10g twice daily<br>versus<br>placebo        | hypercholesterolemic patients   | Parallel groups<br>double-blind        |
| <b>Ruoff , 1978</b><br>n=21/19<br>follow-up: 3.2 years          | colestipol<br>versus<br>placebo                        | hypercholesterolemic patients   | Parallel groups                        |
| <b>Ryan , 1974</b><br>n=44/48<br>follow-up: 3.0 years           | colestipol15 g/day<br>versus<br>placebo                | patients with hypercholesterolemia  | Parallel groups                        |
| <b>UCS (Dorr) , 1978</b><br>n=1149/1129<br>follow-up: 1.9 years | colestipol hydrochloride 32 mg/dl<br>versus<br>placebo | Hommes et femmes, >18 ans   | Parallel groups<br>double blind        |

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## 6 statins

| Trial   | Treatments                                  | Patients  | Trials design and methods        |
|---|---|---|----------------------------------|
| <b>any statin vs no statin</b>                                    |   |   |                                  |
| <b>Sakamoto , 2006</b><br>n=241/245<br>follow-up: up to 24 months | any available statin<br>versus<br>no statin | Japanese patients with AMI within 96 hours of AMI onset | Parallel groups<br>open<br>Japan |

continued...

| Trial  | Treatments  | Patients   | Trials design and methods   |
|--|---|--|---|
| <b>atorvastatin vs placebo</b>   |   |  |   |
| MIRACL , 2001<br>n=1538/1548<br>follow-up: 1 and 4 months              | Atorvastatin, 80 mg (early initiation)<br>versus<br>Placebo                               | unstable angina or nonQ-wave acute MI  | Parallel groups<br>Double blind<br>Europe, North America, South Africa, and Australasia |
| macin , 2005<br>n=NA<br>follow-up: 30 days                             | atorvastatin 40 mg daily for 30 days<br>versus<br>placebo                                 | patients admitted within 48 hours of onset of ACS with CRP levels >or =1.4 mg/dL   | Parallel groups<br>double-blind   |
| <b>fluvastatin vs placebo</b>  |   |  |   |
| LIPS (sub groups) , 2002<br>n=417/407<br>follow-up: 1, 4, and 6 months | Fluvastatin, 80 mg<br>versus<br>Placebo   | patients with unstable angina and successful first percutaneous coronary intervention  | Parallel groups<br>double blind<br>Europe, Canada, and Brazil                           |
| FLORIDA , 2002<br>n=265/275<br>follow-up: 1, 4, and 6 months           | Fluvastatin, 80 mg (early initiation)<br>versus<br>Placebo                                | patients with an AMI and total cholesterol of <6.5 mmol/l  | Parallel groups<br>double blind<br>The Netherlands                                      |
| Czech trial ongoing<br>[NCT00171275]<br>n=NA<br>follow-up: 52 weeks    | fluvastatin<br>versus<br>placebo  | -  | Parallel groups<br>double blind   |
| <b>lovastatin vs placebo</b>   |   |  |   |
| AFCAPS/TexCAPS , 1998<br>n=3304/3301<br>follow-up: 5.2 years           | lovastatin 20-40 mg/d<br>versus<br>placebo  | men and women without clinically evident atherosclerotic cardiovascular disease with average total cholesterol (TC) and LDL-C levels and below-average high-density lipoprotein cholesterol (HDL-C) levels | Parallel groups<br>double blind<br>USA  |
| <b>pravastatin vs placebo</b>  |   |  |   |
| LAMIL , 1997<br>n=36/33<br>follow-up: 1 and 3 months                   | Pravastatin, 10-20 mg (starting at D3)<br>versus<br>Placebo                               | patients suffering an acute myocardial infarction  | Parallel groups<br>double blind<br>Belgium  |
| RECIFE , 1999<br>n=30/30<br>follow-up: 1.5 months                      | Pravastatin, 40 mg<br>versus<br>Placebo   | Patients with acute myocardial infarction or unstable angina and total cholesterol levels at admission >=5.2 mmol/L or LDL >=3.4 mmol/L  | Parallel groups<br>double blind<br>Canada   |
| PAIS , 2001<br>n=50/49<br>follow-up: 1 and 3 months                    | Pravastatin, 40 mg (initiated within 48 hours of hospital admission)<br>versus<br>Placebo | patients with acute coronary syndromes   | Parallel groups<br>double blind<br>The Netherlands                                      |
| PACT , 2004<br>n=1710/1698<br>follow-up: 1 months                      | Pravastatin, 20-40 mg within 24 hours of the onset of symptoms in<br>versus<br>Placebo    | patients with unstable angina, non-ST-segment elevation myocardial infarction, or ST-segment elevation myocardial infarction within 24 hours of the onset of symptoms                                      | Parallel groups<br>double blind<br>Australia  |

continued...

| Trial  | Treatments  | Patients  | Trials design and methods   |
|--|---|---|---|
| <b>WOSCOPS , 1995</b><br>n=3302/3293<br>follow-up: 4.9 years                   | pravastatin 40 mg daily<br>versus<br>placebo  | men aged 45-64 yr with no history of myocardial infarction and with raised plasma cholesterol levels (LDL cholesterol of at least 155 mg/dL, total cholesterol of at least 252 mg/dL) | Parallel groups<br>double blind<br>Scotland   |
| <b>simvastatin vs placebo</b>  |   |   |   |
| <b>A to Z , 2004</b><br>n=2265/2232<br>follow-up: 1 and 4 months               | Simvastatin, 40-80 mg early initiation<br>versus<br>Placebo   | patient with an acute coronary syndrome (ACS)   | Parallel groups<br>Double aveugle<br>41 countries   |
| <b>Ren , 2009</b><br>n=NA<br>follow-up:  | simvastatin (40 mg/d for 4 weeks)<br>versus<br>placebo  | patients with unstable angina pectoris  | Parallel groups<br>double-blind   |
| <b>atorvastatin vs usual care</b>  |   |   |   |
| <b>Colivicchi , 2002</b><br>n=40/41<br>follow-up: 1, 3, and 6 months           | Atorvastatin, 80 mg daily early initiation<br>versus<br>Usual care  | unstable angina pectoris or non-Q-wave myocardial infarction  | Parallel groups<br>open<br>Italy  |
| <b>ESTABLISH , 2004</b><br>n=35/35<br>follow-up: 1, 4, and 6 months            | Atorvastatin, 20 mg early initiation<br>versus<br>Usual care  | patients with ACS undergoing emergency coronary angiography and percutaneous coronary intervention  | Parallel groups<br>open<br>Japan  |
| <b>pravastatin vs usual care</b>   |   |   |   |
| <b>L-CAD , 2000</b><br>n=70/56<br>follow-up: 1, 4, and 6 months                | Pravastatin, 20-40 mg (strating on average at D6)<br>versus<br>Usual care                                   | patients with acute coronary syndrome   | Parallel groups<br>open<br>Germany  |
| <b>PTT , 2002</b><br>n=79/85<br>follow-up: 1 and 6 months                      | Pravastatin, 40 mg<br>versus<br>Usual care  | patients who underwent coronary balloon angioplasty of the infarct-related artery during the first month of acute myocardial infarction   | Parallel groups<br>open<br>Turkey   |
| <b>OACIS-LIPID , 2008</b><br>n=176/177<br>follow-up: 9 months                  | pravastatin 10 mg/daily<br>versus<br>no pravastatin   | patients with AMI who had plasma total cholesterol levels of 200-250 mg/dl and triglyceride levels <300 mg/dl   | Parallel groups<br>open   |
| <b>pitavastatin vs atorvastatin</b>  |   |   |   |
| <b>JAPAN ACS , 2009</b><br>[NCT00242944]<br>n=307<br>follow-up: 8-12 months    | pitavastatin 4 mg daily<br>versus<br>atorvastatin 20mg daily  | patients with acute coronary syndrome undergoing IVUS-guided percutaneous coronary intervention   | Parallel groups<br>open<br>Japan  |
| <b>atorvastatin vs pravastatin</b>   |   |   |   |
| <b>PROVE IT - TIMI 22 , 2004</b><br>n=2099/2063<br>follow-up: 24 mo (18-36 mo) | 80 mg of atorvastatin daily (intensive therapy).<br>versus<br>40 mg of pravastatin daily (standard therapy) | patients who had been hospitalized for an acute coronary syndrome within the preceding 10 days  | Parallel groups<br>double blind<br>UK, US, AUstralia, Italy, France, Germany, Spain, Canada |

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## 7 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.

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