

# Clinical trials of UFH

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## 1 acute myocardial infarction

| Trial  | Treatments  | Patients   | Trials design and methods       |
|--|---|--|---------------------------------|
| <b>UFH vs no heparin</b>   |   |  |                                 |
| <a href="#">ISIS-2 Pilot , 1987</a><br>n=106/103<br>follow-up:<br>65279;In-hospital, 1 y (deat | UFH nNo bolus, 1000 IU/h for 48 h<br>versus<br>65279;No heparin                     | patients with s65279;uspected MI <=24 h  | Parallel groups<br>open         |
| <a href="#">DUCCS , 1994</a><br>n=128/122<br>follow-up: 14 d                                   | UFH no bolus, 15 IU/kg per h for 4 d;<br>target aPTT 5090 s<br>versus<br>No heparin | patients with acute myocardial infarction<br>four hours after APSAC administration,<br>age <=85 y STEMI <=12 h | Parallel groups<br>open         |
| <b>UFH vs placebo</b>  |   |  |                                 |
| <a href="#">ECSG , 1992</a><br>n=324/320<br>follow-up: In-hospital                             | UFH 5000 IU bolus, UFH 1000 IU/h for<br>48120 h<br>versus<br>Placebo                | patients treated with alteplase<br>thrombolysis for acute myocardial<br>infarction, Age 2170 y STEMI <=6h      | Parallel groups<br>Double-blind |
| <a href="#">OSIRIS , 1992</a><br>n=64/64<br>follow-up: In-hospital                             | UFH 10 000 IU bolus, 1000 IU/h for 24 h<br>versus<br>Placebo                        | STEMI w=6 h  | Parallel groups<br>Double-blind |

More details and results :

- antithrombotics for acute myocardial infarction in all type of patients at <http://www.trialresultscenter.org/go-Q36>
- heparin (UFH or LMWH) for acute myocardial infarction in patients eligible to receive fibrinolytic therapy at <http://www.trialresultscenter.org/go-Q308>

## References

### ISIS-2 Pilot, 1987:

Randomized factorial trial of high-dose intravenous streptokinase, of oral aspirin and of intravenous heparin in acute myocardial infarction. ISIS (International Studies of Infarct Survival) pilot study. Eur Heart J 1987;8:634-42 [2887430]

### DUCCS, 1994:

O'Connor CM, Meese R, Carney R, Smith J, Conn E, Burks J, Hartman C, Roark S, Shadoff N, Heard M 3rd A randomized trial of intravenous heparin in conjunction with anistreplase (anisoylated plasminogen streptokinase activator complex) in acute myocardial infarction: the Duke University Clinical Cardiology Study (DUCCS) 1. J Am Coll Cardiol 1994;23:11-8 [8277068]

**ECSG, 1992:**

de Bono DP, Simoons ML, Tijssen J, Arnold AE, Betriu A, Burgersdijk C, Lopez Bescos L, Mueller E, Pfisterer M, Van de Werf F Effect of early intravenous heparin on coronary patency, infarct size, and bleeding complications after alteplase thrombolysis: results of a randomised double blind European Cooperative Study Group trial. Br Heart J 1992;67:122-8 [1540431]

**OSIRIS, 1992:**

Col J, Decoster O, Hanique G, Delligne B, Boland J, Pirenne B, Cheron Infusion of heparin conjunct to streptokinase accelerates reperfusion of acute myocardial infarction: results of a double blind randomized study (OSIRIS).6891 Circulation. 1992;86(suppl 1):259a.

## 2 acute coronary syndrome

2

| Trial   | Treatments   | Patients  | Trials design and methods       |
|---|--|---|---------------------------------|
| <b>UFH vs control (on top of aspirin)</b>                               |  |   |                                 |
| Holdright , 1994<br>n=154/131<br>follow-up: hospital stay               | intravenous heparin plus oral aspirin (150 mg once daily)<br>versus<br>aspirin alone 150 mg/d  | unstable angina   | Parallel groups<br>single blind |
| RISC (heparin+aspirin vs ASP) , 1990<br>n=210/189<br>follow-up: 90 days | 5 days of intermittent intravenous heparin + oral aspirin 75 mg/day<br>versus<br>oral aspirin 75 mg/day  | unstable angina or non-Q-wave myocardial infarction   | Parallel groups<br>open         |
| Theroux (heparin+ASP vs ASP) , 1988<br>n=122/121<br>follow-up: 3-9 days | aspirin 325 mg/d + heparin 1000 UI/hr IV<br>versus<br>aspirin 325 mg/d   |   | double blind                    |
| <b>UFH, warfarin vs control (on top of aspirin)</b>                     |  |   |                                 |
| ATACS (Cohen) , 1994<br>n=105/109<br>follow-up: 12 weeks                | aspirin 162.5 mg daily plus heparin (activated partial thromboplastin time, two times control) followed by aspirin 162.5 mg daily plus warfarin (international normalized ratio, 2 to 3) for 12 weeks.<br>versus<br>aspirin alone (162.5 mg daily) for 12 weeks. | patients with unstable rest angina or non-Q-wave myocardial infarction with last episode of pain within 48 hours of randomization and who were nonprior aspirin users | Parallel groups<br>single blind |

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| <b>Trial</b>  | <b>Treatments</b>   | <b>Patients</b>  | <b>Trials design and methods</b> |
|---|---|--|----------------------------------|
| Cohen (ATACS pilot) (heparin+aspirin vs asp) , 1990<br>n=37/32<br>follow-up: 12 weeks | aspirin (80 mg/day) plus heparin and then warfarin<br>versus<br>aspirin (325 mg/day)  | Patients between 21 and 75 years with unstable angina or non-Q-wave MI with last episode of pain within 48 hours of screening. | Parallel groups<br>open          |
| <b>UFH vs placebo</b>   |   |  |                                  |
| RISC (heparin vs PBO) , 1990<br>n=198/199<br>follow-up: 1y (5,30 and 90 days)         | 5 days of intermittent intravenous heparin<br>versus<br>placebo   | men with unstable coronary artery disease (unstable angina or non-Q-wave myocardial infarction)                                | Factorial plan<br>Sweden         |
| Theroux (heparin vs PBO) , 1988<br>n=118/118<br>follow-up: 3-9 days                   | heparin (1000 units per hour by intravenous infusion)<br>versus<br>placebo  | patients with acute unstable angina pectoris   | double blind                     |
| <b>UFH + aspirin vs placebo</b>   |   |  |                                  |
| RISC (ASP+ heparin vs PBO) , 1990<br>n=210/199<br>follow-up: 1y (5,30 and 90 days)    | oral aspirin 75mg/d + intermittent IV heparin 10000UI/d followed by 7500 UI 6-hourly for 4 days<br>versus<br>placebo  | men with unstable coronary artery disease (unstable angina or non-Q-wave myocardial infarction)                                | Sweden                           |
| Theroux (heparin+aspirin vs PBO) , 1988<br>n=122/118<br>follow-up: 3-9 days           | heparin (1000 units per hour by intravenous infusion)+ aspirin (325 mg twice daily)<br>versus<br>aspirin (325 mg twice daily)                                     | -  | double blind                     |
| <b>UFH vs placebo (on top of aspirin)</b>   |   |  |                                  |
| Gurfinkel (UFH+aspirin vs aspirin) , 1995<br>n=70/73<br>follow-up: 5-7 days           | aspirin plus UFH 5000 IU iv then 400 IU/kg body weight per day intravenously and titered by activated partial thromboplastin time<br>versus<br>aspirin 200 mg/day | patients greater than 21 years with unstable angina within 24 hours of randomization   | Parallel groups<br>double blind  |
| <b>UFH, warfarin vs aspirin</b>   |   |  |                                  |
| Cohen (ATACS pilot) (heparin vs asp) , 1990<br>n=24/32<br>follow-up: 12 weeks         | heparin followed by warfarin (without aspirin)<br>versus<br>aspirin 325 mg/day  | Patients between 21 and 75 years with unstable angina or non-Q-wave MI with last episode of pain within 48 hours of screening  | Parallel groups<br>open          |

More details and results :

- antithrombotics for acute coronary syndrome in all type of patients at <http://www.trialresultscenter.org/go-Q24>
- heparin (UFH or LMWH) for acute coronary syndrome in all type of patients at <http://www.trialresultscenter.org/go-Q171>

## References

### **Holdright, 1994:**

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### **RISC (heparin+aspirin vs ASP), 1990:**

Risk of myocardial infarction and death during treatment with low dose aspirin and intravenous heparin in men with unstable coronary artery disease. The RISC Group. Lancet 1990;336:827-30 [1976875]

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### **ATACS (Cohen), 1994:**

Cohen M, Adams PC, Parry G, Xiong J, Chamberlain D, Wiecek I, Fox KA, Chesebro JH, Strain J, Keller C Combination antithrombotic therapy in unstable rest angina and non-Q-wave infarction in nonprior aspirin users. Primary end points analysis from the ATACS trial. Antithrombotic Therapy in Acute Coronary Syndromes Research Group. Circulation 1994;89:81-8 [8281698]

### **Cohen (ATACS pilot) (heparin+aspirin vs asp), 1990:**

Cohen M, Adams PC, Hawkins L, Bach M, Fuster V Usefulness of antithrombotic therapy in resting angina pectoris or non-Q-wave myocardial infarction in preventing death and myocardial infarction (a pilot study from the Antithrombotic Therapy in Acute Coronary Syndromes Study Group). Am J Cardiol 1990;66:1287-92 [2244556]

### **RISC (heparin vs PBO), 1990:**

Risk of myocardial infarction and death during treatment with low dose aspirin and intravenous heparin in men with unstable coronary artery disease. The RISC Group. Lancet 1990;336:827-30 [1976875]

### **Theroux (heparin vs PBO), 1988:**

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Risk of myocardial infarction and death during treatment with low dose aspirin and intravenous heparin in men with unstable coronary artery disease. The RISC Group. Lancet 1990 Oct 6;336:827-30 [1976875]

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### **Gurfinkel (UFH+aspirin vs aspirin), 1995:**

Gurfinkel EP, Manos EJ, Mejia RI, Cerd MA, Duronto EA, Garca CN, Daroca AM, Mautner B Low molecular weight heparin versus regular heparin or aspirin in the treatment of unstable angina and silent ischemia. J Am Coll Cardiol 1995 Aug;26:313-8 [7608429]

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Cohen M, Adams PC, Hawkins L, Bach M, Fuster V Usefulness of antithrombotic therapy in resting angina pectoris or non-Q-wave myocardial infarction in preventing death and myocardial infarction (a pilot study from the Antithrombotic Therapy in Acute Coronary Syndromes Study Group). Am J Cardiol 1990;66:1287-92 [2244556]

### 3 DVT prophylaxis

| Trial  | Treatments  | Patients   | Trials design and methods       |
|--|---|--|---------------------------------|
| <b>IPC + UFH vs control</b>                            |   |  |                                 |
| Killewich , 1997<br>n=NA<br>follow-up:                 | low-dose heparin sodium therapy (5000 U every 12 hours) and calf-length intermittent mechanical compression devices<br>versus<br>no prophylaxis | patients undergoing aortic reconstruction for aneurysmal or occlusive disease                | open                            |
| <b>UFH vs control</b>                                  |   |  |                                 |
| Handley , 1972<br>n=30/30<br>follow-up: 14 d           | Heparin 5000 U IV (loading dose) followed by 20 000 U IV twice daily<br>versus<br>no heparin  | Myocardial infarction  | Parallel groups                 |
| Handley (low dose) , 1972<br>n=26/24<br>follow-up: 7 d | Heparin 5000 U IV and 7500 U SC as soon as possible, then 7500 U SC twice daily<br>versus<br>no heparin   | Myocardial infarction  | Parallel groups                 |
| Blech , 1981<br>n=50/50<br>follow-up: <=14 days        | Unfractionated heparin, 5000 U trice daily, until mobilized<br>versus<br>control  | Heart failure, chest infection   | Parallel groups<br>open         |
| Gallus , 1973<br>n=38/40<br>follow-up: until mobile    | heparin 5000 U SC 3 times daily<br>versus<br>no heparin   | Myocardial infarction  | Parallel groups                 |
| Cade<br>n=NA<br>follow-up: <=10 days                   | -   | Age >40, complete bed rest, cardiac failure, obesity, previous VTE, cancer or recent surgery | Parallel groups                 |
| Warlow , 1973<br>n=73/73<br>follow-up: 10 d            | Heparin sodium 5000 U SC twice dailyly<br>versus<br>no heparin  | Myocardial infarction  | Parallel groups<br>double blind |

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| <b>Trial</b>   | <b>Treatments</b>  | <b>Patients</b>  | <b>Trials design and methods</b> |
|--|--|--|----------------------------------|
| Gardlund , 1996<br>n=5776/5917<br>follow-up: <=60 days | Unfractionated heparin, 5000 U twice daily, until hospital discharge, <=21 days versus control | Age >55, infectious disease<br>Immobilization                                      | Parallel groups<br>open          |
| Emerson , 1973<br>n=37/41<br>follow-up: NA             | Heparin Low dose SCium9 versus no heparin  | Myocardial infarction  | Parallel groups                  |
| Zawilska , 1989<br>n=50/53<br>follow-up: 14-21 d       | Heparin sodium 5000 IU SC twice daily for 14 to 21 days versus no heparin                      | patients with acute myocardial infarction, disqualified for thrombolytic treatment | Parallel groups                  |
| <b>UFH vs no treatment</b>                             |  |  |                                  |
| Abernethy , 1974<br>n=63/62                            | UFH twice daily for 7 days versus no treatment   | all other general surgery  |                                  |
| Abraham-Inpijn , 1979<br>n=20/20                       | UFH twice daily for 7 days versus no treatment   | all other general surgery  |                                  |
| Allen , 1978<br>n=30/30                                | UFH twice daily for D versus no treatment  | urologic surgery   |                                  |
| Bergqvist , 1979<br>n=84/77                            | UFH twice daily for 5 days versus no treatment   | elective orthopedic surgery  |                                  |
| Bergqvist , 1979<br>n=32/23                            | UFH twice daily for 5 days versus no treatment   | traumatic orthopedic surgery   |                                  |
| Bergqvist , 1980<br>n=53/58                            | UFH twice daily for 5 days versus no treatment   | all other general surgery  |                                  |
| Caloghera , 1984<br>n=40/40                            | UFH 3 times daily for 7 days versus no treatment   | all other general surgery  |                                  |
| Clarke-Pearson , 1983<br>n=95/105                      | UFH twice daily for 7 days versus no treatment   | all other general surgery  |                                  |
| Coe , 1978<br>n=28/24                                  | UFH twice daily for D versus no treatment  | urologic surgery   |                                  |

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| <b>Trial</b>                      | <b>Treatments</b>  | <b>Patients</b>              | <b>Trials design and methods</b> |
|-----------------------------------|--|------------------------------|----------------------------------|
| Dechavanne , 1974<br>n=29/29      | UFH 3 times daily for 10 days<br>versus<br>no treatment      | elective orthopedic surgery  |                                  |
| Dechavanne , 1975<br>n=20/21      | UFH 3 times daily for 10 days<br>versus<br>no treatment      | elective orthopedic surgery  |                                  |
| Galasko , 1976<br>n=50/50         | UFH twice daily (duration unknown)<br>versus<br>no treatment | traumatic orthopedic surgery |                                  |
| Gallus , 1973<br>n=23/23          | UFH 3 times daily for A<br>versus<br>no treatment            | traumatic orthopedic surgery |                                  |
| Gallus , 1973<br>n=8/9            | UFH twice daily for A days<br>versus<br>no treatment         | elective orthopedic surgery  |                                  |
| Gallus , 1973<br>n=100/109        | UFH 3 times daily for A<br>versus<br>no treatment            | all other general surgery    |                                  |
| Gallus , 1976<br>n=408/412        | UFH 3 times daily for 7 days<br>versus<br>no treatment       | all other general surgery    |                                  |
| Gordon-Smith , 1972<br>n=NA       | UFH twice daily for 5 days<br>versus<br>no treatment         | all other general surgery    |                                  |
| Groote Schuur , 1979<br>n=323/323 | UFH 3 times daily for 6 days<br>versus<br>no treatment       | all other general surgery    |                                  |
| Gruber<br>n=119/113               | UFH 3 times daily for 7 days<br>versus<br>no treatment       | All other general surgery    |                                  |
| Kakkar (IMT)<br>n=2111/2137       | UFH 3 times daily for 7 days<br>versus<br>no treatment       | All other general surgery    |                                  |
| Kettunen , 1974<br>n=83/117       | UFH 3 times daily for 7 days<br>versus<br>no treatment       | all other general surgery    |                                  |
| Kopenhagen , 1982<br>n=162/50     | UFH twice daily<br>versus<br>no treatment                    | all other general surgery    |                                  |

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| <b>Trial</b>                   | <b>Treatments</b>                                       | <b>Patients</b>              | <b>Trials design and methods</b> |
|--------------------------------|---|------------------------------|----------------------------------|
| Kraytman , 1976<br>n=21/28     | UFH 3 times daily for 6 days<br>versus<br>no treatment  | all other general surgery    |                                  |
| Kraytman , 1977<br>n=23/27     | UFH 3 times daily for 6 days<br>versus<br>no treatment  | all other general surgery    |                                  |
| Mannucci , 1976<br>n=23/24     | UFH 3 times daily for 7 days<br>versus<br>no treatment  | elective orthopedic surgery  |                                  |
| Marchelli , 1983<br>n=30/30    | UFH 3 times daily for ?<br>versus<br>no treatment       | all other general surgery    |                                  |
| Morris , 1974<br>n=36/36       | UFH twice daily for 10 days<br>versus<br>no treatment   | elective orthopedic surgery  |                                  |
| Morris , 1977<br>n=24/24       | UFH 3 times daily for 10 days<br>versus<br>no treatment | traumatic orthopedic surgery |                                  |
| Multiunit , 1974<br>n=128/128  | UFH twice daily for 7 days<br>versus<br>no treatment    | all other general surgery    |                                  |
| Nicolaides , 1972<br>n=128/122 | UFH twice daily for 7 days<br>versus<br>no treatment    | all other general surgery    |                                  |
| Plante , 1979<br>n=42/66       | UFH twice daily for 8 days<br>versus<br>no treatment    | all other general surgery    |                                  |
| Sagar , 1974<br>n=264/236      | UFH twice daily for 5 days<br>versus<br>no treatment    | all other general surgery    |                                  |
| Sebeseri , 1975<br>n=34/31     | UFH twice daily for D<br>versus<br>no treatment         | urologic surgery             |                                  |
| Spebar , 1981<br>n=24/19       | UFH twice daily for 5-7 days<br>versus<br>no treatment  | all other general surgery    |                                  |
| VTCSG , 1975<br>n=34/30        | UFH twice daily for 10 days<br>versus<br>no treatment   | elective orthopedic surgery  |                                  |

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| <b>Trial</b>                               | <b>Treatments</b>   | <b>Patients</b>   | <b>Trials design and methods</b> |
|--|---|---|----------------------------------|
| Welin-Berger , 1982<br>n=20/20             | UFH twice daily for 7 days<br>versus<br>no treatment  | elective orthopedic surgery   |                                  |
| Ziemski , 1979<br>n=30/20                  | UFH 3 times daily for 2 days<br>versus<br>no treatment  | all other general surgery   |                                  |
| Cerrato , 1978<br>n=50/50<br>follow-up: NA | Unfractionated heparin, 5000 IU<br>subcutaneously 3 times a day, starting 2<br>hours preoperatively for +7 days<br>versus<br>no treatment | Elective neurosurgery for tumors, 40 years<br>or older                      |                                  |
| <b>UFH vs placebo</b>                      |   |   |                                  |
| Abraham-Inpijn , 1975<br>n=12/13           | UFH twice daily for 8 days<br>versus<br>placebo   | elective orthopedic surgery   |                                  |
| Bejjani , 1983<br>n=17/17                  | UFH twice daily for 2 days<br>versus<br>placebo   | urologic surgery  |                                  |
| Belch , 1980<br>n=24/25                    | UFH twice daily for 7 days<br>versus<br>placebo   | all other general surgery   |                                  |
| Pitt , 1980<br>n=36/37<br>follow-up: 2-3 d | Heparin 500 U IV twice daily<br>versus<br>placebo   | patients with acute myocardial infarction<br>of less than 48 hours duration | Parallel groups<br>open          |
| Covey , 1975<br>n=53/52                    | UFH twice daily for 8 days<br>versus<br>placebo   | all other general surgery   |                                  |
| Hampson , 1974<br>n=48/52                  | UFH 3 times daily for 7- 10 days<br>versus<br>placebo   | elective orthopedic surgery   |                                  |
| Hedlund , 1979<br>n=30/29                  | UFH 3 times daily for 5 days<br>versus<br>placebo   | urologic surgery  |                                  |
| Jourdan , 1984<br>n=21/21                  | UFH twice daily for 5 days<br>versus<br>placebo   | all other general surgery   |                                  |
| Kakkar , 1972<br>n=39/39                   | UFH twice daily for 7 days<br>versus<br>placebo   | All other general surgery   |                                  |

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| <b>Trial</b>                        | <b>Treatments</b>                                 | <b>Patients</b>              | <b>Trials design and methods</b> |
|-------------------------------------|---|------------------------------|----------------------------------|
| Kiil , 1978<br>n=650/663            | UFH twice daily for 7 days<br>versus<br>placebo   | All other general surgery    |                                  |
| Kraytman , 1977<br>n=25/22          | UFH 3 times daily for 6 days<br>versus<br>placebo | all other general surgery    |                                  |
| Kruse-Blinkenberg , 1980<br>n=29/33 | UFH 3 times daily for 8 days<br>versus<br>placebo | all other general surgery    |                                  |
| Kutnowski , 1977<br>n=6/13          | UFH 3 times daily for 6 days<br>versus<br>placebo | urologic surgery             |                                  |
| Lahnborg , 1975<br>n=58/54          | UFH twice daily for 5 days<br>versus<br>placebo   | all other general surgery    |                                  |
| Lahnborg , 1976<br>n=24/24          | UFH twice daily for 5 days<br>versus<br>placebo   | all other general surgery    |                                  |
| Lahnborg , 1980<br>n=70/69          | UFH twice daily for 10 days<br>versus<br>placebo  | traumatic orthopedic surgery |                                  |
| Lawrence , 1977<br>n=133/129        | UFH twice daily for 5 days<br>versus<br>placebo   | all other general surgery    |                                  |
| Lowe , 1981<br>n=51/49              | UFH twice daily for 16 days<br>versus<br>placebo  | elective orthopedic surgery  |                                  |
| Marchetti , 1982<br>n=16/13         | UFH 3 times daily<br>versus<br>placebo            | all other general surgery    |                                  |
| Moskovitz , 1978<br>n=29/23         | UFH 3 times daily for 7 days<br>versus<br>placebo | traumatic orthopedic surgery |                                  |
| Moskovitz , 1978<br>n=35/32         | UFH 3 times daily for 7 days<br>versus<br>placebo | elective orthopedic surgery  |                                  |
| Muiticentre , 1984<br>n=222/108     | UFH twice daily for 5-7 days<br>versus<br>placebo | all other general surgery    |                                  |

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| <b>Trial</b>                   | <b>Treatments</b>                                   | <b>Patients</b>              | <b>Trials design and methods</b> |
|--------------------------------|---|------------------------------|----------------------------------|
| Ribaudo , 1975<br>n=75/75      | UFH twice daily for A days<br>versus<br>placebo     | all other general surgery    |                                  |
| Roberts , 1975<br>n=39/45      | UFH twice daily for 7 days<br>versus<br>placebo     | all other general surgery    |                                  |
| Strand , 1975<br>n=55/55       | UFH twice daily for 7 days<br>versus<br>placebo     | all other general surgery    |                                  |
| Svend-Hansen , 1981<br>n=65/65 | UFH 3 times daily for 14 days<br>versus<br>placebo  | traumatic orthopedic surgery |                                  |
| Taberner , 1978<br>n=50/50     | UFH twice daily for 7 days<br>versus<br>placebo     | all other general surgery    |                                  |
| Torngren<br>n=47/62            | UFH twice daily for 6-8 days<br>versus<br>placebo   | all other general surgery    |                                  |
| Torngren , 1978<br>n=10/10     | UFH 3 times daily for 6-8 days<br>versus<br>placebo | all other general surgery    |                                  |
| Torngren , 1978<br>n=66/62     | UFH twice daily for 6-8 days<br>versus<br>placebo   | all other general surgery    |                                  |
| Vandendris , 1980<br>n=32/33   | UFH 3 times daily for 6 days<br>versus<br>placebo   | urologic surgery             |                                  |
| Williams , 1978<br>n=106/106   | UFH twice daily for 14 days<br>versus<br>placebo    | elective orthopedic surgery  |                                  |
| Wu , 1977<br>n=44/44           | UFH twice daily for 7 days<br>versus<br>placebo     | all other general surgery    |                                  |
| Xabregas , 1977<br>n=27/26     | UFH twice daily for 14 days<br>versus<br>placebo    | traumatic orthopedic surgery |                                  |
| <b>IPC + UFH vs UFH</b>        |   |                              |                                  |

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| <b>Trial</b>                                       | <b>Treatments</b>   | <b>Patients</b>           | <b>Trials design and methods</b> |
|--|---|---------------------------|----------------------------------|
| Ramos , 1996<br>n=1355/1196<br>follow-up:          | prophylactic regimen of Pneumatic<br>compression stocking and subcutaneous<br>heparin<br>versus<br>with 5,000 U of subcutaneous heparin<br>every 12 h   | cardiac surgery           | Parallel groups<br>open          |
| Siragusa (H) , 1994<br>n=35/35<br>follow-up:       | -   | -                         | Parallel groups<br>open          |
| <b>UFH vs aspirin</b>                              |   |                           |                                  |
| Loew , 1977<br>n=60/67                             | UFH twice daily for 7 days<br>versus<br>aspirin   | all other general surgery |                                  |
| Vinazzer , 1980<br>n=402/404                       | UFH twice daily for A days<br>versus<br>aspirin   | all other general surgery |                                  |
| <b>UFH vs DHE</b>                                  |   |                           |                                  |
| Muiticentre , 1984<br>n=226/110                    | UFH twice daily for 5-7 days<br>versus<br>DHE   | all other general surgery |                                  |
| Muiticentre 53,S4 , 1984<br>n=214/110              | UFH twice daily for 5-7 days<br>versus<br>DHE   | all other general surgery |                                  |
| <b>UFH vs oral anticoagulant</b>                   |   |                           |                                  |
| van Geloven , 1977<br>n=74/80                      | UFH twice daily for 4 days<br>versus<br>Oral anticoagulant  | all other general surgery |                                  |
| <b>out of hospital UFH vs standard prophylaxis</b> |   |                           |                                  |
| Manganelli , 1998<br>n=79/80                       | 65279;in hospital thromboprophylaxis<br>followed by out of hospital UFH 5000 IU<br>three times a day for a total duration of<br>30 days<br>versus<br>UFH 5000 IU three times a day for 15<br>days | THR                       |                                  |
| <b>GCS + UFH vs UFH</b>                            |   |                           |                                  |

continued...

| <b>Trial</b>                                    | <b>Treatments</b>  | <b>Patients</b>  | <b>Trials design and methods</b> |
|---|--|--|----------------------------------|
| *Rasmussen (adj) , 1988<br>n=NA<br>follow-up:   | subcutaneous heparin and graduated compression stockings to the knee (TED stockings),<br>versus<br>subcutaneous heparin                      | patients (age more than 40 yrs) admitted for major abdominal surgery | Parallel groups<br>open          |
| Torngren , 1980<br>n=NA                         | -  | -  |                                  |
| Wille-Jorgensen , 1985<br>n=86/90<br>follow-up: | low-dose heparin treatment with graded compression stockings<br>versus<br>low-dose heparin treatment (5000 units twice daily subcutaneously) | patients undergoing Abdominal surgery                                | parallel groups                  |
| Wille-Jorgensen , 1991<br>n=83/83<br>follow-up: | low dose heparin and graded compression stockings<br>versus<br>low dose heparin  | patients undergoing Abdominal surgery                                | parallel groups                  |

More details and results :

- antithrombotics for DVT prophylaxis in orthopedic surgery at <http://www.trialresultscenter.org/go-Q37>
- antithrombotics for DVT prophylaxis in medical patients at <http://www.trialresultscenter.org/go-Q87>
- antithrombotics for DVT prophylaxis in general surgery at <http://www.trialresultscenter.org/go-Q92>
- antithrombotics for DVT prophylaxis in urologic surgery at <http://www.trialresultscenter.org/go-Q93>
- antithrombotics for DVT prophylaxis in neurosurgery at <http://www.trialresultscenter.org/go-Q99>
- graduated compression stockings for DVT prophylaxis in all type of patients at <http://www.trialresultscenter.org/go-Q158>
- antiplatelets drug for DVT prophylaxis in orthopedic surgery at <http://www.trialresultscenter.org/go-Q186>
- UFH for DVT prophylaxis in general surgery at <http://www.trialresultscenter.org/go-Q191>
- UFH for DVT prophylaxis in all type of surgery at <http://www.trialresultscenter.org/go-Q192>
- UFH for DVT prophylaxis in urologic surgery at <http://www.trialresultscenter.org/go-Q194>
- heparin (UFH or LMWH) for DVT prophylaxis in neurosurgery at <http://www.trialresultscenter.org/go-Q197>
- LMWH for DVT prophylaxis in neurosurgery at <http://www.trialresultscenter.org/go-Q198>

- mechanical devices for thromboprophylaxis for DVT prophylaxis in all type of patients at <http://www.trialresultscenter.org/go-Q402>
- antithrombotics for DVT prophylaxis in patients with myocardial infarction at <http://www.trialresultscenter.org/go-Q406>
- mechanical devices for thromboprophylaxis for DVT prophylaxis in general non orthopaedic surgery at <http://www.trialresultscenter.org/go-Q466>

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## 4 superficial thrombophlebitis

| Trial   | Treatments | Patients | Trials design and methods |
|---|------------|----------|---------------------------|
| <b>Prophylactic UFH vs no treatment</b>         |            |          |                           |
| Belcaro (prophylactic UFH vs no) , 1999<br>n=NA | -          | -        |                           |

More details and results :

- antithrombotics for superficial thrombophlebitis in superficial thrombophlebitis of the leg at <http://www.trialresultscenter.org/go-Q218>

## References

Belcaro (prophylactic UFH vs no), 1999: