

# Clinical trials of certoparin

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## 1 thrombosis prevention

Trial	Treatments	Patients	Trials design and methods
<b>certoparin vs control</b>			
<b>Kock , 1995</b> n=176/163 follow-up: 15 days	Certoparin 3000 IU versus no prophylaxis	patients with minor injuries treated with plaster-cast immobilisation of the leg	Parallel groups open
<b>certoparin vs UFH</b>			
<b>CERTIFY , 2010</b> n=NA	-	-	
<b>certoparin vs unfractionated heparin</b>			
<b>Schmitz-Huebner , 1984</b> n=84/42 follow-up: 1 month	Certoparin (dose 1 and dose 2) b.i.d. versus UFH 10 000 units	Abdominal surgery	Blind
<b>Sasahara , 1986</b> n=137/132 follow-up: 7 days	Certoparin 3000 + DHE versus UFH 10 000 units +DHE	Abdominal surgery	Blind
<b>Voigt , 1986</b> n=103/97 follow-up: 10 days	Certoparin 3000 + DHE versus UFH 10 000 units	Abdominal surgery	Blind
<b>Welzel , 1988</b> n=98/103 follow-up: 7 days	Certoparin 2500 + DHE versus UFH 10 000 units+DHE	Abdominal surgery	Open
<b>Kakkar , 1989</b> n=88/91 follow-up:	Certoparin 3000 + DHE versus UFH 10 000 units+DHE	Abdominal surgery	Blind
<b>Adolf , 1989</b> n=205/205 follow-up: 1 month	Certoparin 3000 versus UFH 15 000 units	Abdominal surgery	Blind
<b>Heilmann , 1989</b> n=150/150 follow-up: 10 days	Certoparin 3000 versus UFH 15 000 units	Gynaecological surgery	Blind
<b>Baumgartner , 1989</b> n=99/102 follow-up: 10 days	Certoparin 3000 + DHE versus UFH 5 000 units+DHE	Abdominal surgery	Blind

continued...

<b>Trial</b>	<b>Treatments</b>	<b>Patients</b>	<b>Trials design and methods</b>
Hoffmann and Largiade , 1990 n=464/452 follow-up:	Certoparin 3000 + DHE versus UFH 10 000 units	Abdominal surgery	NA
Kopenhagen , 1990 n=51/53	Certoparin 3000 anti Xa units versus UFH 15 000 units	Abdominal surgery	Blind
Schielke , 1991 n=47/51	Certoparin 3000 anti Xa units + DHE versus UFH 10 000 units + DHE	Abdominal surgery	Open
Kopenhagen , 1992 n=336/337	Certoparin 3000 anti Xa units versus UFH 15 000 units	Abdominal surgery	Blind
Hoffmann and Largiader , 1992 n=298/296	Certoparin 3000 anti Xa units versus UFH 10 000 units	Abdominothoracic surgery	Blind
Heilmann , 1997 n=179/179	Certoparin 3000 anti Xa units versus UFH 15 000 units	Gynaecological and breast surgery	Blind
Haas , 1999 n=11542/11536	Certoparin 3000 anti Xa units versus UFH 15 000 units	General surgery	Blind
<b>certoparine + DHE vs Unfractionated heparin</b>			
Haas , 1987 n=80/80	Sandoz +0.5mg DHE versus Unfractionated heparin	Elective hip	
Lassen , 1989 n=68/71 follow-up: 6 days	certoparin 3000+0.5mg DHE x1 versus placebo	Hip fracture	double blind
Lassen , 1988 n=118/122 follow-up: 6 days	certoparin 3000+0.5mg DHE, x1 versus Placebo	Elective hip	double blind

More details and results :

- antithrombotics for thrombosis prevention in orthopedic surgery at <http://www.trialresultscenter.org/go-Q37>
- antithrombotics for thrombosis prevention in elective hip replacement at <http://www.trialresultscenter.org/go-Q39>
- antithrombotics for thrombosis prevention in hip Fracture at <http://www.trialresultscenter.org/go-Q40>

- antithrombotics for thrombosis prevention in medical patients at <http://www.trialresultscenter.org/go-Q87>
- antithrombotics for thrombosis prevention in general surgery at <http://www.trialresultscenter.org/go-Q92>
- antithrombotics for thrombosis prevention in gynaecological surgery at <http://www.trialresultscenter.org/go-Q94>
- antithrombotics for thrombosis prevention in abdominal surgery at <http://www.trialresultscenter.org/go-Q96>
- heparin (UFH or LMWH) for thrombosis prevention in orthopedic surgery at <http://www.trialresultscenter.org/go-Q189>
- LMWH for thrombosis prevention in orthopedic surgery at <http://www.trialresultscenter.org/go-Q190>
- heparin (UFH or LMWH) for thrombosis prevention in general surgery at <http://www.trialresultscenter.org/go-Q195>
- LMWH for thrombosis prevention in general surgery at <http://www.trialresultscenter.org/go-Q196>
- LMWH for thrombosis prevention in gynaecological surgery at <http://www.trialresultscenter.org/go-Q200>
- LMWH for thrombosis prevention in abdominal surgery at <http://www.trialresultscenter.org/go-Q202>
- antithrombotics for thrombosis prevention in patients with immobilization of the lower extremities at <http://www.trialresultscenter.org/go-Q405>
- LMWH for thrombosis prevention in medical patients at <http://www.trialresultscenter.org/go-Q719>

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## References

### **Kock, 1995:**

Kock HJ, Schmit-Neuerburg KP, Hanke J, Rudofsky G, Hirche H Thromboprophylaxis with low-molecular-weight heparin in outpatients with plaster-cast immobilisation of the leg. *Lancet* 1995;346:459-61 [[7637478](#)]

### **CERTIFY, 2010:**

Riess H, Haas S, Tebbe U, Gerlach HE, Abletshauser C, Sieder C, Rossol S, Pfeiffer B, Schellong SM A randomized, double-blind study of certoparin vs. unfractionated heparin to prevent venous thromboembolic events in acutely ill, non-surgical patients: CERTIFY Study. *J Thromb Haemost* 2010;8:1209-15 [[20218984](#)] [10.1111/j.1538-7836.2010.03848.x](https://doi.org/10.1111/j.1538-7836.2010.03848.x)

### **Schmitz-Huebner, 1984:**

Schmitz-Huebner U, Bnte H, Freise G, Reers B, Rskemeyer C, Scherer R, Schulte H, van de Loo J Clinical efficacy of low molecular weight heparin in postoperative thrombosis prophylaxis. *Klin Wochenschr* 1984;62:349-53 [[6374278](#)]

### **Sasahara, 1986:**

Sasahara AA, Koppenhagen K, Hring R, Welzel D, Wolf H Low molecular weight heparin plus dihydroergotamine for prophylaxis of postoperative deep vein thrombosis. *Br J Surg* 1986;73:697-700 [[3530367](#)]

### **Voigt, 1986:**

Voigt J, Hamelmann H, Hedderich J, Seifert J, Buchhammer T, Khler A [Effectiveness and side effects of low-molecular weight heparin-dihydroergotamine in preventing thromboembolism in abdominal surgery] Zentralbl Chir 1986;111:1269-305 [[3544605](#)]

**Welzel, 1988:**

Welzel D, Wolf H, Koppenhagen K Antithrombotic defense during the postoperative period. Clinical documentation of low molecular weight heparin. Arzneimittelforschung 1988;38:120-3 [[2835055](#)]

**Kakkar, 1989:**

Kakkar VV, Stringer MD, Hedges AR, Parker CJ, Welzel D, Ward VP, Sanderson RM, Cooper D, Kakkar S Fixed combinations of low-molecular weight or unfractionated heparin plus dihydroergotamine in the prevention of postoperative deep vein thrombosis. Am J Surg 1989;157:413-8 [[2539025](#)]

**Adolf, 1989:**

Adolf J, Knee H, Roder JD, van de Flierdt E, Siewert JR [Thromboembolism prophylaxis with low molecular weight heparin in abdominal surgery] Dtsch Med Wochenschr 1989;114:48-53 [[2535983](#)]

**Heilmann, 1989:**

Heilmann L, Kruck M, Schindler AE [Prevention of thrombosis in gynecology: double-blind comparison of low molecular weight heparin and unfractionated heparin] Geburtshilfe Frauenheilkd 1989;49:803-7 [[2553528](#)]

**Baumgartner, 1989:**

Baumgartner A, Jacot N, Moser G, Krhenbhl B Prevention of postoperative deep vein thrombosis by one daily injection of low molecular weight heparin and dihydroergotamine. Vasa 1989;18:152-6 [[2545054](#)]

**Hoffmann and Largiade, 1990:**

**Koppenhagen, 1990:**

**Schielke, 1991:**

**Koppenhagen, 1992:**

**Hoffmann and Largiader, 1992:**

**Heilmann, 1997:**

**Haas, 1999:**

**Haas , 1987:**

Haas S, Stemberger A, Fritsche HM, Welzel D, Wolf H, Lechner F, Blumel G Prophylaxis of deep vein thrombosis in high risk patients undergoing total hip replacement with low molecular weight heparin plus dihydroergotamine. Arzneimittelforschung 1987 Jul;37:839-43 [[2823840](#)]

**Lassen, 1989:**

Lassen MR, Borris LC, Christiansen HM, Moller-Larsen F, Knudsen VE, Boris P, Nehen AM, Jurik AG, de Carvalho A, Nielsen BW Prevention of thromboembolism in hip-fracture patients. Comparison of low-dose heparin and low-molecular-weight heparin combined with dihydroergotamine. Arch Orthop Trauma Surg 1989;108:10-3 [[2913977](#)]

**Lassen, 1988:**

Lassen MR, Borris LC, Christiansen HM, Moller-Larsen F, Knudsen VE, Boris P, Nehen AM, de Carvalho A, Jurik AG, Nielsen BW Heparin/dihydroergotamine for venous thrombosis prophylaxis: comparison of low-dose heparin and low molecular weight heparin in hip surgery. Br J Surg 1988 Jul;75:686-9 [[2843255](#)]

## 2 pulmonary embolism

Trial	Treatments	Patients	Trials design and methods
<b>Certoparin vs unfractionated heparin</b>			
Certoparin-Study Group sub group , 1998 n=39/41 follow-up: 6 mo	Certoparin, 8000 IU twice daily, 14 days versus Unfractionated heparin: bolus 5000 IU, infusion 20 IU/kg per hour	Symptomatic PE	Parallel groups open

More details and results :

- antithrombotics for pulmonary embolism in all type of patients at <http://www.trialresultscenter.org/go-Q102>

### References

#### Certoparin-Study Group sub group, 1998:

Kirchmaier CM, Wolf H, Schfer H, Ehlers B, Breddin HK Efficacy of a low molecular weight heparin administered intravenously or subcutaneously in comparison with intravenous unfractionated heparin in the treatment of deep venous thrombosis. Certoparin-Study Group. Int Angiol 1998;17:135-45 [9821025]

Entry terms: Certoparin, certoparin, certoparin sodium, Mono-Embolex, Novartis brand of certoparin sodium, Alphaparin, Grifols brand of certoparin sodium,