Clinical trials of LMWH for venous thrombosis in all type of patients

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1 extended LMWH

Trial	Treatments	Patients	Trials design and methods
Enoxaparin vs acenocoumarol			
Veiga , 2000 n=50/50 follow-up: 6-9 mo	UFH, APTT 1.52.0d followed by Enoxaparin 4,000 IU qd versus UFH, APTT 1.52.0d followed by Acenocoumarol target INR 2-3	patients with objective diagnosis of DVT by Venography	open
Nadroparin vs acenocoumarol			
Lopez-Beret , 2001 n=81/77 follow-up: 6-9 mo	LMWH, 1,025 IU/10 kg bid followed by Nadroparin 1,025 IU/10 kg bid versus LMWH, 1,025 IU/10 kg bid followed by Acenocoumarol target INR 2-3	patients with objective diagnosis of DVT by compression ultrasonography	open
Lopaciuk , 1999 n=101/101 follow-up: 9 mo	LMWH, 85 UI/kg bid followed by Nadroparin 85 IU/kg qd versus LMWH, 85 UI/kg bid followed by Acenocoumarol target INR 2-3	patients with objective diagnosis of DVT by Venography	open
Tinzaparin vs acenocoumarol			
Romera , 2009 n=119/122 follow-up: 12 months	tinzaparin SC 175 IU anti-Xa per kg once daily for 6 months versus acenocoumarol for target INR 2-3 for 6 months after initial LMWH (until INR 2-3)	patients with symptomatic proximal DVT of the lowerlimbs confirmed by compression duplex ultrasound scan	Parallel groups open Spain
Enoxaparin vs coumarin			
Gonzlez-Fajardo , 2008 n=85/80 follow-up: 1y, 5y	long-term anticoagulant treatment with enoxaparin during at least 3 months versus long-term anticoagulant treatment with coumarin during at least 3 months	patients with symptomatic, unilateral, first-episode DVT	Parallel groups open, blind assessment Spain
Bemiparin vs warfarin			
Kakkar , 2003 n=221/103 follow-up: 3 mo	LMWH, 115 IU/kg qd followed by Bemiparin 3,500 IU qd versus A: UFH, 30/40,000IU qd; B: LMWH, 115 IU/kg qd followed by Warfarin target INR 2-3	patients with objective diagnosis of DVT by Venography/compression ultrasonography	open
Dalteparin vs warfarin			

continued...

Trial	Treatments	Patients	Trials design and methods
Lee , 2003 n=336/336 follow-up: 6 mo	LMWH, 200 IU/kg qd followed by Dalteparin 150 IU/kg qd versus LMWH, 200 IU/kg qd followed by Warfarin target INR 2-3	patients with cancer and objective diagnosis of DVT by Venography/compression ultrasonography	open
Das , 1996 n=50/55 follow-up: 3 mo	UFH followed by Dalteparin 5,000 IU qd versus UFH followed by Warfarin target INR 2-3	patients with objective diagnosis of DVT by Venography	open
Enoxaparin vs warfarin			
Deitcher , 2003 n=51/30 follow-up: 6 mo	LMWH: 1a, 1 mg/kg q12h; 1b, 1 mg/kg qd12h followed by Enoxaparin 1a: 1 mg/kg qd; 1b: 1.5 mg/kg qd versus LMWH, 1 mg/kg q12h followed by Warfarin target INR 2-3	patients with objective diagnosis of DVT	open
Meyer , 2002 n=71/58 follow-up: 3 mo	LMWH, 1.5 mg/kg qd followed by Enoxaparin 1.5 mg/Kg qd versus LMWH, 1.5 mg/kg qd followed by Warfarin target INR 2-3	patients with cancer and objective diagnosis of DVT by Venography/compression ultrasonography	open
Gonzalez-Fajardo , 1999 n=93/92 follow-up: 9 mo	LMWH, 4,000 IU bid followed by Enoxaparin 4,000 IU qd versus UFH followed by Warfarin target INR 2-3	patients with objective diagnosis of DVT by Venography	Parallel groups open
Pini , 1994 n=93/94 follow-up: 9 mo	UFH, APTT 1.31.9 followed by Enoxaparin 4,000 IU qd versus UFH, APTT 1.31.9 followed by Warfarin target INR 2-3.5	patients with objective diagnosis of DVT by Venography (diagnosed by strain-gauge plethysmography plus D-dimer latex assay and confirmed by venography)	open
Tinzaparin vs warfarin			
Hull , 2002 n=369/368 follow-up: 9 mo	LMWH, 175 IU/kg qd followed by Tinzaparin 175 IU/kg qd versus UFH 5 d, followed by UFH therapeutic APTT followed by Warfarin target INR 2-3	patients with objective diagnosis of DVT by Venography/compression ultrasonography	open

References

Veiga, 2000:

Veiga F, Escrib A, Maluenda MP, Lpez Rubio M, Margalet I, Lezana A, Gallego J, Ribera JM Low molecular weight heparin (enoxaparin) versus oral anticoagulant therapy (acenocoumarol) in the long-term treatment of deep venous thrombosis in the elderly: a randomized trial. Thromb Haemost 2000;84:559-64 [11057850]

Lopez-Beret, 2001:

Lpez-Beret P, Orgaz A, Fontcuberta J, Doblas M, Martinez A, Lozano G, Romero A Low molecular weight heparin versus oral anticoagulants in the long-term treatment of deep venous thrombosis. J Vasc Surg 2001;33:77-90 [11137927]

Lopaciuk, 1999:

Lopaciuk S, Bielska-Falda H, Noszczyk W, Bielawiec M, Witkiewicz W, Filipecki S, Michalak J, Ciesielski L, Mackiewicz Z, Czestochowska E, Zawilska K, Cencora A Low molecular weight heparin versus acenocoumarol in the secondary prophylaxis of deep vein thrombosis. Thromb Haemost 1999;81:26-31 [9974369]

Romera, 2009:

Romera A, Cairols MA, Vila-Coll R, Mart X, Colom E, Bonell A, Lapiedra O A randomised open-label trial comparing long-term sub-cutaneous low-molecular-weight heparin compared with oral-anticoagulant therapy in the treatment of deep venous thrombosis. Eur J Vasc Endovasc Surg 2009;37:349-56 [19121589]

Gonzlez-Fajardo, 2008:

Gonzlez-Fajardo JA, Martin-Pedrosa M, Castrodeza J, Tamames S, Vaquero-Puerta C Effect of the anticoagulant therapy in the incidence of post-thrombotic syndrome and recurrent thromboembolism: Comparative study of enoxaparin versus coumarin. J Vasc Surg 2008;48:953-9 [18639417]

Kakkar, 2003:

Kakkar VV, Gebska M, Kadziola Z, Saba N, Carrasco P Low-molecular-weight heparin in the acute and long-term treatment of deep vein thrombosis. Thromb Haemost 2003;89:674-80 [12669122]

Lee, 2003:

Lee AY, Levine MN, Baker RI, Bowden C, Kakkar AK, Prins M, Rickles FR, Julian JA, Haley S, Kovacs MJ, Gent M Low-molecular-weight heparin versus a coumarin for the prevention of recurrent venous thromboembolism in patients with cancer. N Engl J Med 2003;349:146-53 [12853587]

Lee AY, Rickles FR, Julian JA, Gent M, Baker RI, Bowden C, Kakkar AK, Prins M, Levine MN Randomized comparison of low molecular weight heparin and coumarin derivatives on the survival of patients with cancer and venous thromboembolism. J Clin Oncol 2005;23:2123-9 [15699480]

Das, 1996:

Das SK, Cohen AT, Edmondson RA, Melissari E, Kakkar VV Low-molecular-weight heparin versus warfarin for prevention of recurrent venous thromboembolism: a randomized trial. World J Surg 1996;20:521-6; discussion 526-7 [8661630]

Deitcher, 2003:

Deitcher SR, Kessler MG, Lyons RM., imag Treatment of venous thromboembolic events (VTE) in patients with active malignancy: a randomized study of enoxaparin alone versus initial enoxaparin followed by warfarin for a 180-day period [abstract].s-e Blood 2003; 102:322a

Meyer, 2002:

Meyer G, Marjanovic Z, Valcke J, Lorcerie B, Gruel Y, Solal-Celigny P, Le Maignan C, Extra JM, Cottu P, Farge D Comparison of low-molecular-weight heparin and warfarin for the secondary prevention of venous thromboembolism in patients with cancer: a randomized controlled study. Arch Intern Med 2002;162:1729-35 [12153376]

Gonzalez-Fajardo, 1999:

Gonzalez-Fajardo JA, Arreba E, Castrodeza J, Perez JL, Fernandez L, Agundez I, Mateo AM, Carrera S, Gutirrez V, Vaquero C Venographic comparison of subcutaneous low-molecular weight heparin with oral anticoagulant therapy in the long-term treatment of deep venous thrombosis. J Vasc Surg 1999;30:283-92 [10436448]

Gonzlez-Fajardo JA, Martin-Pedrosa M, Castrodeza J, Tamames S, Vaquero-Puerta C Effect of the anticoagulant therapy in the incidence of post-thrombotic syndrome and recurrent thromboembolism: Comparative study of enoxaparin versus coumarin. J Vasc Surg 2008 Oct;48:953-9 [18639417]

Pini, 1994:

Pini M, Aiello S, Manotti C, Pattacini C, Quintavalla R, Poli T, Tagliaferri A, Dettori AG Low molecular weight heparin versus warfarin in the prevention of recurrences after deep vein thrombosis. Thromb Haemost 1994;72:191-7 [7831650]

Hull, 2002:

Hull RD, Pineo GF, Mah AF, et al, for the LITE Study A randomized trial evaluating long-term lowmolecular- weight heparin therapy for three months versus intravenous heparin followed by warfarin sodium [abstract].582258 Blood 2002; 100:148a

2 home treatment

Trial	Treatments	Patients	Trials design and methods
LMWH at home vs UFH in hospital			
Koopman , 1996 n=202/198 follow-up: 12 weeks	home treatment with twice daily injections of nadroparin at a dose adjusted for patients weight; versus UH (APTT adjusted dose, continuous intravenous infusion of 1250 IU per hour after initial intravenous bolus of 5000 IU) in hospital.	patients with acute symptomatic proximal DVT proven by venography or duplex scan	Parallel groups open The Netherlands, France, Italy, New Zealand Australia
Boccalon , 2000 n=99/101 follow-up: 6 months	home treatment with sub-cutaneous injection of LMWH (dalteparin sodium, enoxaparin sodium or nadroparin calciumas chosen by the attending physician) at the recommended dose followed by anticoagulant for 6months versus Sub-cutaneous injection of LMWH(dalteparin sodium, enoxaparin sodium or nadroparin calcium as chosen by attending physician) at the recommended dose followed by anticoagulant for 6 months initially in hospital for 10 +/- 2 days then at home	patienst with confirmed diagnosis (by ultrasonography or venography) of proximal DVT not more than 30 days before enrolment	Parallel groups NA France
Levine , 1996 n=247/253 follow-up: 90 days	home treatment by Sub-cutaneous enoxaparin 1 mg per kg body weight twice a day for at least 5 days versus UH (APTT adjusted dose, continuous intravenous infusion of 20,000 IU after initial intravenous bolus of 5000 IU) in hospital for at least 5 days	patients with acute proximal DVT proven on venography or duplex scan	Parallel groups open Canada
Ramacciotti , 2004 n=104/97 follow-up:	home treatment by once daily Subcutaneous injection of enoxaparin at a dose of 1.5 mg/kg for 5-10 days versus in hospital intravenous bolus injection of 5000 IU of UFH followed by intravenous 500 IU/kg/day adjusted to maintain an aPTT of 1.5-2.5 times the normal value for 5-10 days.	patienst with DVT symptoms for greater than or equal to 10 days and proximal lower limb DVT confirmed by duplex ultrasound or venography	Parallel groups open Brazil
Daskalopoulos , 2005 n=55/53 follow-up:	home treatment with single sub- cutaneous injection of LMWH (tinzaparin sodium) in a weight adjusted dose (175 anti Xa IU/Kg) daily for 6 months versus Intravenous bolus of 5000IU UFH followed by intrvenous infusion of UFH for 5-7 days. APTT was measured after 4 hours of the initiation of heparin administration and was repeated 6 hours thereafter to reach the therapeutic range (ratio: 1.5-2.5). Oral an	patients with acute proximal DVT confirmed by colour duplex UScan not more than 1 week onset	Parallel groups open Greece

continued...

Trial	Treatments	Patients	Trials design and methods
Chong , 2005 n=150/148 follow-up: 24 months	once daily sub-cutaneous injection of enoxaparin 1.5mg/kg for a minimum of 5 days plus 10mg of warfarin for 3 months adjusted to achieve INR above 2 and within range accepted by the investigator versus 5000 IU bolus of unfractionated heparin (UFH) for a minimum of 5 days plus 10mg warfarin started on day 1 of the treatment for 3 months	patients with diagnosis of symptomatic lower extrimity DVT (proimal or distal) confirmed by either contrast venography and/or ultrasonography, be suitable for treatment in an outpatient setting	Parallel groups open Australia, New Zealand, Poland, South Africa

References

Koopman, 1996:

Koopman MM, Prandoni P, Piovella F, Ockelford PA, Brandjes DP, van der Meer J, Gallus AS, Simonneau G, Chesterman CH, Prins MH Treatment of venous thrombosis with intravenous unfractionated heparin administered in the hospital as compared with subcutaneous low-molecular-weight heparin administered at home. The Tasman Study Group. N Engl J Med 1996;334:682-7 [8594426]

van den Belt AG, Bossuyt PM, Prins MH, Gallus AS, Bller HR Replacing inpatient care by outpatient care in the treatment of deep venous thrombosis–an economic evaluation. TASMAN Study Group. Thromb Haemost 1998;79:259-63 [9493572]

Boccalon, 2000:

Boccalon H, Elias A, Chal JJ, Cadne A, Gabriel S Clinical outcome and cost of hospital vs home treatment of proximal deep vein thrombosis with a low-molecular-weight heparin: the Vascular Midi-Pyrenees study. Arch Intern Med 2000;160:1769-73 [10871969]

Levine, 1996:

Levine M, Gent M, Hirsh J, Leclerc J, Anderson D, Weitz J, Ginsberg J, Turpie AG, Demers C, Kovacs M A comparison of low-molecular-weight heparin administered primarily at home with unfractionated heparin administered in the hospital for proximal deep-vein thrombosis. N Engl J Med 1996;334:677-81 [8594425]

O'Brien B, Levine M, Willan A, Goeree R, Haley S, Blackhouse G, Gent M Economic evaluation of outpatient treatment with low-molecular-weight heparin for proximal vein thrombosis. Arch Intern Med 1999;159:2298-304 [10547169]

Ramacciotti, 2004:

Ramacciotti E, Arajo GR, Lastoria S, Maffei FH, Karaoglan de Moura L, Michaelis W, Sandri JL, Dietrich-Neto F An open-label, comparative study of the efficacy and safety of once-daily dose of enoxaparin versus unfractionated heparin in the treatment of proximal lower limb deep-vein thrombosis. Thromb Res 2004;114:149-53 [15342210]

Daskalopoulos, 2005:

Daskalopoulos ME, Daskalopoulou SS, Tzortzis E, Sfiridis P, Nikolaou A, Dimitroulis D, Kakissis I, Liapis CD Long-term treatment of deep venous thrombosis with a low molecular weight heparin (tinzaparin): a prospective randomized trial. Eur J Vasc Endovasc Surg 2005;29:638-50 [15878544]

Chong, 2005:

Chong BH, Brighton TA, Baker RI, Thurlow P, Lee CH Once-daily enoxaparin in the outpatient setting versus unfractionated heparin in hospital for the treatment of symptomatic deep-vein thrombosis. J Thromb Thrombolysis 2005;19:173-81 [16082604]

3 Low molecular weight heparin

Trial	Treatments	Patients	Trials design and methods
Dalteparin vs unfractionated heparin			
Holm et al , 1986 n=29/27 follow-up: Hospital Stay	Dalteparin Subcutaneous twice daily ajusted for 7 Days, 57-107 U/kg BID versus unfractionated heparin subcutaneous twice daily 16000-30000 U	-	
Bratt et al , 1985 n=25/29 follow-up: 23 Months (mean)	Dalteparin Intravenousv (ajusted) for >=5 Days, 120 U/kg BID versus unfractionated heparin intravenous APPTx1.7-3.5	-	
Bratt et al , 1990 n=60/60 follow-up: 65279;Hospital stay	Dalteparin Subcutaneous twice daily ajusted for >= 5 Days, 120 U/kg BID versus unfractionated heparin intravenous APPTx2-4	-	
Lindmarker et al , 1993 n=101/103 follow-up: 6 Months	Dalteparin Subcutaneous once daily for >= 5 Days, 200 U/kg BID versus unfractionated heparin intravenous APPTx1.5-3	-	
Enoxaparin vs unfractionated heparin			
Simonneau et al , 1993 n=67/67 follow-up: 3 Months	Enoxaparin Subcutaneous twice daily for 0 Days, 100 U/kg BID versus unfractionated heparin intravenous APPTx1.5-2.5	-	
Minoctoparine vs unfractionated heparin			
Faivre et al , 1988 n=33/37 follow-up: 10 Days	Minoctoparine (CY222) Subcutaneous twice daily for 10 Days,155 U/kg BID versus unfractionated heparin subcutaneous twice daily APPTx2-3	-	
Nadroparin vs unfractionated heparin			
Collaborative European Multicentre , 1991 n=70/66 follow-up: 12 Weeks	Nadroparin Subcutaneous twice daily for 10 Days, 90 U/kg BID versus unfractionated heparin intravenous APPTx1.5-2	-	
Prandoni et al , 1992 n=85/85 follow-up: 6 Months	Nadroparin Subcutaneous twice daily for >=0 Days, 90 U/kg BID versus unfractionated heparin intravenous APPTx1.5-2	-	

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Trial	Treatments	Patients	Trials design and methods
Lopaciuk et al , 1992 n=74/75 follow-up: 3 Months	Nadroparin Subcutaneous twice daily for 10 Days, 92 U/kg BID versus unfractionated heparin subcutaneous twice daily APPTx1.5-2.5	-	
Tinzaparin vs unfractionated heparin			
Hull et al , 1992 n=213/219 follow-up: 3 Months	Tinzaparin Subcutaneous once daily for >= Days, 175 U/kg BID versus unfractionated heparin intravenous APPTx2-3	-	

References

Holm et al , 1986:

Bratt et al , 1985:

Bratt G, Tornebohm E, Granqvist S, Aberg W, Lockner D A comparison between low molecular weight heparin (KABI 2165) and standard heparin in the intravenous treatment of deep venous thrombosis. Thromb Haemost 1985 Dec 17;54:813-7 [3911482]

Bratt et al, 1990:

Bratt G, Aberg W, Johansson M, Tornebohm E, Granqvist S, Lockner D Two daily subcutaneous injections of fragmin as compared with intravenous standard heparin in the treatment of deep venous thrombosis (DVT). Thromb Haemost 1990 Dec 28;64:506-10 [1964751]

Lindmarker et al , 1993:

Ruan C, Gu J, Wang X, Chu X, Pan J Application of GPIIIa gene Taq I polymorphism to determination of carrier status in Glanzmann's thrombasthenia families of Chinese origin. Thromb Haemost 1993 Jan 11;69:64-9 [8095357]

Simonneau et al , 1993:

Simonneau G, Charbonnier B, Decousus H, Planchon B, Ninet J, Sie P, Silsiguen M, Combe S Subcutaneous low-molecular-weight heparin compared with continuous intravenous unfractionated heparin in the treatment of proximal deep vein thrombosis. Arch Intern Med 1993 Jul 12;153:1541-6 [8391792]

Faivre et al , 1988:

Faivre R, Neuhart Y, Kieffer Y, Apfel F, Magnin D, Didier D, Toulemonde F, Bassand JP, Maurat JP [A new treatment of deep venous thrombosis: low molecular weight heparin fractions. Randomized study] Presse Med 1988 Feb 13;17:197-200 [2965375]

Collaborative European Multicentre, 1991:

A randomised trial of subcutaneous low molecular weight heparin (CY 216) compared with intravenous unfractionated heparin in the treatment of deep vein thrombosis. A collaborative European multicentre study. Thromb Haemost 1991 Mar 4;65:251-6 [1646490]

Prandoni et al , 1992:

Prandoni P, Lensing AW, Buller HR, Carta M, Cogo A, Vigo M, Casara D, Ruol A, ten Cate JW Comparison of subcutaneous low-molecular-weight heparin with intravenous standard heparin in proximal deep-vein thrombosis. Lancet 1992 Feb 22;339:441-5 [1346817]

Lopaciuk et al , 1992:

Lopaciuk S, Meissner AJ, Filipecki S, Zawilska K, Sowier J, Ciesielski L, Bielawiec M, Glowinski S, Czestochowska E Subcutaneous low molecular weight heparin versus subcutaneous unfractionated heparin in the treatment of deep vein thrombosis: a Polish multicenter trial. Thromb Haemost 1992 Jul 6;68:14-8 [1325076]

Hull et al , 1992:

Hull RD, Raskob GE, Pineo GF, Green D, Trowbridge AA, Elliott CG, Lerner RG, Hall J, Sparling T, Brettell HR Subcutaneous low-molecular-weight heparin compared with continuous intravenous heparin in the treatment of proximal-vein thrombosis. N Engl J Med 1992 Apr 9;326:975-82 [1545850]

4 once daily LMWH

Trial	Treatments	Patients	Trials design and methods
once daily dalteparin vs twice daily dalteparin			
Holmstrm , 1992 n=50/51 follow-up:	once daily dalteparin 200 U (anti-FXa)/kg for at least 5 days versus twice daily dalteparin 100 U (anti-FXa)/kg for at least 5 days	Patients with a first occurence of DVT in the lower limb, confirmed with phlebographytio	Parallel groups open Sweden
Partsch , 1996 n=76/64 follow-up:	Fragmin administered 200 IU/kg once daily for at least 7 days versus Fragmin 100 IU/kg twice daily for at least 7 days	patients presented with DVT extending into the iliofemoral segment diagnosed by duplex ultrasonographyA	Parallel groups NA Austria
once daily enoxaparin vs twice daily enoxaparin			
Merli , 2001 n=298/312 follow-up:	enoxaparin 1.5 mg/kg body weight once daily versus S.c. enoxaparin at fixed dosages of 1.0 mg/kg of body weight twice daily	patients with a symptomatic lower-extremity DVT confirmed by venography or ultrasonography (including patients with confirmed PE)	Parallel groups double blind Europe, United States of America and Australia, image/pj
once daily logiparin vs twice daily logiparin			
Siegbahn , 1989 n=10/10 follow-up:	Once daily logiparin 150 XaI U/kgp, imag versus twice daily logiparin 75 XaI U/kg	patients with a venographically confirmed episode of DVT	Parallel groups single blind Sweden and Denmark
once daily nadroparin vs twice daily nadroparin			
Charbonnier , 1998 n=316/335 follow-up:	Once daily nadroparin 20,500 (AXa IU/ml)continued for at least 5 days versus twice daily nadroparin 10,250 (AXa IU/ml)continued for at least 5 days	patients with acute symptomatic proximal DVT in popliteal vein or above documented by venography	Parallel groups double blind Europe
once daily enoxaparin vs UFH			
Merli (once daily vs UFH) , 2001 n=298/290 follow-up: 3 months	Initial therapy with enoxaparin 1.5 mg/kg body weight once daily versus Initial therapy with dose-adjusted intravenous unfractionated heparin	patients with a symptomatic lower-extremity DVT confirmed by venography or ultrasonography (including patients with confirmed PE)	Parallel groups partialy blinded Europe, United States of America and Australia, image/pj

References

Holmstrm, 1992:

Holmostrm M, Berglund MC, Granquist S, Bratt G, Trnebohm E, Lockner D Fragmin once or twice daily subcutaneously in the treatment of deep venous thrombosis of the leg. Thromb Res 1992;67:49-55 [1332213]

Partsch, 1996:

Partsch H, Kechavarz B, Mostbeck A, Khn H, Lipp C Frequency of pulmonary embolism in patients who have iliofemoral deep vein thrombosis and are treated with once- or

twice-daily low-molecular-weight heparin. J Vasc Surg 1996;24:774-82 [8918323]

Merli, 2001:

Merli G, Spiro TE, Olsson CG, Abildgaard U, Davidson BL, Eldor A, Elias D, Grigg A, Musset D, Rodgers GM, Trowbridge AA, Yusen RD, Zawilska K Subcutaneous enoxaparin once or twice daily compared with intravenous unfractionated heparin for treatment of venous thromboembolic disease. Ann Intern Med 2001;134:191-202 [11177331]

Siegbahn, 1989:

Siegbahn A, Y-Hassan S, Boberg J, Bylund H, Neerstrand HS, Ostergaard P, Hedner U Subcutaneous treatment of deep venous thrombosis with low molecular weight heparin. A dose finding study with LMWH-Novo. Thromb Res 1989;55:767-78 [2551070]

Charbonnier, 1998:

Charbonnier BA, Fiessinger JN, Banga JD, Wenzel E, d'Azemar P, Sagnard L Comparison of a once daily with a twice daily subcutaneous low molecular weight heparin regimen in the treatment of deep vein thrombosis. FRAXODI group. Thromb Haemost 1998;79:897-901 [9609216]

Merli (once daily vs UFH), 2001:

Merli G, Spiro TE, Olsson CG, Abildgaard U, Davidson BL, Eldor A, Elias D, Grigg A, Musset D, Rodgers GM, Trowbridge AA, Yusen RD, Zawilska K Subcutaneous enoxaparin once or twice daily compared with intravenous unfractionated heparin for treatment of venous thromboembolic disease. Ann Intern Med 2001 Feb 6;134:191-202 [11177331]

5 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.

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