Clinical trials of direct oral anticoagulant (DAO) for venous thrombosis in all types of patients

TrialResults-center www.trialresultscenter.org

1 direct anti-Xa

Trial	Treatments	Patients	Trials design and methods
apixaban 2.5mg vs discontinuation			
AMPLIFY-EXT 2.5mg , 2012 [NCT00633893] n=842/829 follow-up: 12 mo	Extended Treatment with apixaban 2.5 mg twice daily 12 months versus placebo	patients who have completed their intended treatment for deep vein thrombosis or pulmonary embolism	Parallel groups double blind
apixaban 5mg vs discontinuation			
AMPLIFY-EXT 5mg , 2012 [NCT00633893] n=815/829 follow-up: 12 mo	Extended Treatment with apixaban 5 mg twice daily 12 months versus placebo	patients who have completed their intended treatment for deep vein thrombosis or pulmonary embolism	double blind
rivaroxaban vs discontinuation			
EINSTEIN-extension , 2009 [NCT00439725] n=602/595 follow-up:	rivaroxaban 20 mg once-daily for an additional 6 or 12 months versus placebo	patients who had completed six to 12 months of anticoagulant treatment for an acute episode of VTE	Parallel groups double blind 28 countries
rivaroxaban 20mg vs aspirin			
EINSTEIN CHOICE (20mg) , 2017 [NCT02064439] n=1107/1131 follow-up:	Rivaroxaban 20 mg once daily for 12 months versus ASA (Acetylsalicylic Acid) 100 mg once daily for 12 months	Patients with confirmed symptomatic DVT (Deep Vein Thrombosis) or PE (Pulmonary embolism) who completed 6 or 12 months of treatment of anticoagulation	
heparin/edoxaban vs heparin/VKA			
Edoxaban Hokusai VTE , 2013 [NCT00986154] n=4143/4149 follow-up:	heparin then edoxaban 60mg daily (30mg if creatine clearnce of 30 to 50 ml/min or <60kg) for 3 to 12 months versus heparin then warfarin	patients with acute venous thromboembolism, who had initially received heparin,	Parallel groups double-blind
apixaban (without LMWH) vs LMWH/VKA			
AMPLIFY , 2013 [NCT00643201] n=2691/2704 follow-up: 6 mo	apixaban 10 mg twice daily for 7 days then 5 mg, twice daily, 6 months versus conventional therapy: enoxaparin 1mg/kg twice daily until INR>=2 then warfarin for an INR between 2-4, once daikly, 6 months	patients with deep vein thrombosis or pulmonary embolism	Parallel groups double blind

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Trial	Treatments	Patients	Trials design and methods
Botticelli DVT , 2008 [NCT00252005] n=358/118 follow-up:	apixaban 5 mg twice-daily, 10 mg twice-daily, or 20 mg once-daily for 84-91 days versus low molecular weight heparin followed by vitamin K antagonists	patients with symptomatic deep vein thrombosis	Parallel groups open
rivaroxaban (without LMWH) vs LMWH/VKA			
Einstein-DVT Dose-Ranging Study , 2008 n=NA follow-up:	rivaroxaban 20, 30, or 40 mg once daily versus low-molecular-weight heparin followed by vitamin K antagonists	patients with deep vein thrombosis	open
Einstein-DVT Evaluation , 2010 [NCT00440193] n=1731/1718 follow-up:	rivaroxaban 15 mg twice daily for 3 weeks, then 20 mg daily versus enoxaparin 1 mg/kg twice daily >=5 days, then warfarin with target INR between 2-3	Patients with Confirmed Acute Symptomatic Deep-Vein Thrombosis without Pulmonary Embolism	Parallel groups open (assessor-blind)
Einstein-PE Evaluation , 2012 [NCT00439777] n=2419/2413 follow-up: 9.8 months	rivaroxaban (15 mg twice daily for 3 weeks, followed by 20 mg once daily) for 3, 6, or 12 months versus standard therapy with enoxaparin followed by an adjusted-dose vitamin K antagonist	patients who had acute symptomatic pulmonary embolism with or without deep-vein thrombosis	Parallel groups open 38 countries
ximelagatran (without LMWH) vs LMWH/VKA			
THRIVE I , 2003 n=NA follow-up:	oral ximelagatran (24, 36, 48 or 60 mg twice daily) for 2 weeks versus dalteparin and warfarin for 2 weeks	Patients with acute DVT	

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AMPLIFY-EXT 2.5mg, 2012:

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AMPLIFY-EXT 5mg, 2012:

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EINSTEIN-extension, 2009:

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Oral Rivaroxaban for Symptomatic Venous Thromboembolism. N Engl J Med 2010 Dec 3;: [21128814] 10.1056/NEJMoa1007903

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Edoxaban Hokusai VTE, 2013:

Edoxaban versus Warfarin for the Treatment of Symptomatic Venous Thromboembolism. N Engl J Med 2013 Aug 31;: [23991658] 10.1056/NEJMoa1306638

AMPLIFY, 2013:

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Buller HR, Lensing AW, Prins MH, Agnelli G, Cohen A, Gallus AS, Misselwitz F, Raskob G, Schellong S, Segers A A dose-ranging study evaluating once-daily oral administration of the factor Xa inhibitor rivaroxaban in the treatment of patients with acute symptomatic deep vein thrombosis: the Einstein-DVT Dose-Ranging Study. Blood 2008;112:2242-7 [18621928]

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Einstein-PE Evaluation, 2012:

Oral Rivaroxaban for the Treatment of Symptomatic Pulmonary Embolism. N Engl J Med 2012 Mar 26;: [22449293] 10.1056/NEJMoa1113572

THRIVE I, 2003:

Eriksson H, Whlander K, Gustafsson D, Welin LT, Frison L, Schulman S A randomized, controlled, dose-guiding study of the oral direct thrombin inhibitor ximelagatran compared with standard therapy for the treatment of acute deep vein thrombosis: THRIVE I. J Thromb Haemost 2003 Jan;1:41-7 [12871538]

2 oral direct thrombin inhibitor

Trial	Treatments	Patients	Trials design and methods
dabigatran vs warfarin			
RE-MEDY , 2011 [NCT00329238] n=1430/1426 follow-up: 6 to 36 months	dabigatran 150 mg twice daily for an additional period of 6 to 36 months versus warfarin (to maintain an international normalized ratio of 2.0 to 3.0) for an additional period of 6 to 36 months	Secondary prevention of VTE in patients with VTE who had initially received 3 to 12 months of anticoagulant therapy	Parallel groups double-blind
dabigatran vs discontinuation			
RE-SONATE , 2011 [NCT00558259] n=681/662 follow-up:	dabigatran 150 mg twice daily for an additional period of 6 months versus placebo	Secondary prevention of VTE in patients with VTE who had completed 6-18 months of anticoagulant therapy	Parallel groups double-blind
ximelagatran vs discontinuation			
THRIVE III , 2003 n=612/611 follow-up: 18 months	ximelagatran 24 mg twice daily for 18 months versus placebo for 18 months	patients with venous thromboembolism who had undergone six months of anticoagulant therapy	Parallel groups double blind 18 countries
heparin/dabigatran vs heparin/VKA			

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Trial	Treatments	Patients	Trials design and methods
RE-COVER , 2009 [NCT00291330] n=1274/1265 follow-up: 6 months	dabigatran 150 mg twice daily in a fixed-dose versus warfarin dose-adjusted to an INR between 2.0 and 3.0	patients with acute venous thromboembolism , treated with low molecular weight or unfractionated heparin for 5 to 11 days	Parallel groups double blind
RE-COVER II , 2011 *unpublished* [NCT00680186] n=1294/1295 follow-up: 6 months	dabigatran, 150 mg twice daily, for 6 months versus warfarin, dose-adjusted to an INR of 2.0 and 3.0, for 6 months	patients with acute VTE, treated with low molecular weight or unfractionated heparin for 5 to 11 days	Parallel groups double-blind 31 countries

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RE-MEDY, 2011:

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RE-COVER II, 2011:

Schulman S, Kakkar AK, Goldhaber SZ, Schellong S, Eriksson H, Mismetti P, Christiansen AV, Friedman J, Le Maulf F, Peter N, Kearon C Treatment of acute venous thromboembolism with dabigatran or warfarin and pooled analysis. Circulation 2014 Feb 18;129:764-72 [24344086]

3 synthetic pentasaccharide

Trial	Treatments	Patients	Trials design and methods
idraparinux vs discontinuation			
VanGogh extension , 2007 [NCT00071279] n=594/621 follow-up: 6 months	once-weekly injections of 2.5 mg of idraparinux for 6 months versus placebo	patients who had completed 6 months of prophylaxis with idraparinux or a vitamin K antagonist and in whom extended anticoagulation was warranted	Parallel groups

References

VanGogh extension, 2007:

4 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.

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