Table 103. Strength of applicability for the body of evidence evaluating major venous thromboembolism in patients who had major orthopedic surgery

| Comparison | Strength of applicability | Conclusion with description of applicability |
| --- | --- | --- |
| Incidence of major venous thrombomebolism in total hip replacement | NA | No data |
| Incidence of major venous thrombomebolism in total knee replacement | NA | No data |
| Incidence of major venous thrombomebolism in hip fracture surgery | NA | No data |
| Pharmacologic prophylaxis versus no prophylaxis | Low | Compared with no prophylaxis, patients who had major orthopedic surgery and received pharmacologic prophylaxis had a decreased risk of major venous thromboembolism. Data is highly applicable to dabigatran, primary total knee replacement surgery but is not applicable to total hip replacement or hip fracture surgery. Applicability is limited due to the short duration of followup and because the only trial available was conducted in Japan. |
| Mechanical prophylaxis versus no prophylaxis  | NA | No data |
| Oral antiplatelet agents versus oral vitamin K antagonists | NA | No data |
| Oral antiplatelet agents versus mechanical prophylaxis | NA | No data |
| Injectable low molecular weight heparin agents versus injectable unfractionated heparin | NA | No data |
| Injectable low molecular weight heparin agents versus injectable or oral factor Xa inhibitors | NA | No data |
| Injectable low molecular weight heparin agents versus injectable or oral direct thrombin inhibitors | Low | Compared with injectable or oral direct thrombin inhibitors, patients who had major orthopedic surgery and received injectable low molecular weight heparin agents did not have a difference in the risk of major venous thromboembolism. Data is moderately applicable to primary total hip replacement surgery. Data has low applicability to primary total knee replacement surgery. Data is not applicable to primary or revision surgery for hip fracture. Applicability is limited because all trials were conducted outside of the United States. |
| Injectable low molecular weight heparin agents versus oral vitamin K antagonists | NA | No data |
| Injectable low molecular weight heparin agents versus mechanical prophylaxis | NA | No data |
| Injectable unfractionated heparin versus injectable or oral direct thrombin inhibitors | NA | No data |
| Injectable unfractionated heparin versus injectable or oral factor Xa inhibitors | NA | No data |
| Injectable unfractionated heparin versus mechanical prophylaxis | NA | No data |
| Oral vitamin K antagonists versus mechanical prophylaxis | NA | No data |
| Enoxaparin versus other low molecular weight heparin agents  | NA | No data |
| Intermittent pneumatic compression by Kendall versus the Venaflow intermittent pneumatic compression device | NA | No data |
| ActiveCare intermittent pneumatic compression device versus Flowtron intermittent pneumatic compression device | NA | No data |
| Intermittent pneumatic compression versus graduated compression  | NA | No data |
| Pharmacologic plus mechanical prophylaxis versus pharmacologic prophylaxis | NA | No data |
| Pharmacologic plus mechanical prophylaxis versus mechanical prophylaxis | NA | No data |
| Effect of prolonging prophylaxis for 28 days compared to prophylaxis for 7 to 10 days | Low | Compared to 7 to 10 days of prophylaxis, patients who had major orthopedic surgery and received 28 days of prophylaxis did not have a difference in the odds of major venous thromboembolism. Applicability is limited because the trial was conducted in Italy. Data is highly applicable to the use of oral vitamin K antagonists and to primary total hip replacement. Data is not applicable to primary or revision total knee replacement or hip fracture surgery or other pharmacologic methods of prophylaxis. |
| Inferior vena cava filter versus mechanical prophylaxis | NA | No data |

Abbreviations: NA=Not applicable