

**OPINION
RELATIVE TO
MEDICINAL
PRODUCTS**

enoxaparin

**LOVENOX 6,000 IU, 8,000 IU,
10,000 IU, 12,000 IU, 15,000 IU
and 30,000 IU**

Solution for injection in a pre-filled syringe

New indication(s)

Adopted by the Transparency Committee on 15 June 2022

SUMMARY

The legally binding text is the original French opinion version

- **Antithrombotic agent**
- **Sectors: Retail and hospital**

Key points

Unfavourable opinion for reimbursement of LOVENOX (enoxaparin) in the extended treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE), and prevention of their recurrence(s) in patients with active cancer.

Role in the care pathway?

The presence of progressive cancer or cancer under treatment is considered to be a major persistent risk factor for recurrence of a thromboembolic event; patients have a 4 to 7 times greater risk of developing venous thromboembolism (VTE). Thrombosis is the second leading cause of death in cancer patients, after disease progression.

For short-term treatment (up to 10 days), all the injectable antithrombotic agents with a marketing authorisation can be used. In the extended treatment of symptomatic VTE and prevention of recurrences in patients with active cancer and/or on chemotherapy, only dalteparin and tinzaparin are funded. VKAs are also authorised for extended treatment in active cancer patients, following heparin therapy.

For the first 6 months, it is recommended that DVT or PE be treated using low molecular weight heparin (LMWH), without subsequent VKA therapy. The decision to continue treatment beyond 6 months is taken on a case-by-case basis depending, in particular, on the cancer location, the concomitant treatment (presence or otherwise of chemotherapy), the presence or otherwise of a recurrence in the first 6 months and tolerance to the treatment.

The risk/benefit ratio of continuing anticoagulant therapy will be reassessed regularly for any treatment lasting more than 6 months.

Role of the medicinal product in the care pathway

Considering:

- available clinical data, based primarily on the RIETECAT retrospective observational study, for which the low level of evidence does not enable any robust conclusion to be reached with respect to the efficacy and bleeding risk of enoxaparin at the dosage validated by the MA, in comparison with the available alternatives in particular (see section 07.4 Summary and Discussion),
- the available alternatives (dalteparin and tinzaparin), for which the efficacy and safety have been documented with a better level of evidence, particularly for dalteparin in the randomised CLOT study,

the Committee considers that LOVENOX (enoxaparin) has no role in the extended treatment of DVT/PE, and prevention of their recurrence in patients with active cancer.

Committee's conclusions

Considering all of this information and further to debate and voting, the Committee considers:

Clinical benefit

- ➔ Venous thromboembolic disease is one of the leading causes of cardiovascular death. It is a serious disease that can be life-threatening (potentially fatal pulmonary embolism) or have serious sequelae (post-thrombotic syndrome). It is the second leading cause of death in cancer patients, after disease progression.
- ➔ The proprietary medicinal product LOVENOX (enoxaparin) is a curative and preventive medicinal product.
- ➔ The efficacy/adverse effects ratio of LOVENOX (enoxaparin) has been inadequately established in view of the available clinical data, for which the low level of evidence does not enable its efficacy to be established or the bleeding risk at the dosage validated by the MA to be documented (see section 07.4 Summary and Discussion).
- ➔ There are several medicinal alternatives in this indication, which are LMWHs (tinzaparin and dalteparin).
- ➔ LOVENOX (enoxaparin) has no role in the extended treatment of DVT/PE, and prevention of their recurrence in patients with active cancer.

➔ Public health benefit

Considering:

- the seriousness of venous thromboembolism (VTE) in cancer patients and its incidence,
- the partially met medical need,
- the lack of response to the identified need, and:
 - the lack of a demonstrated additional impact on morbidity and mortality and on quality of life,
 - the absence of an expected additional impact on the organisation of care and the care pathway (SC administration, as for tinzaparin and dalteparin)

LOVENOX (enoxaparin) is unlikely to have an additional impact on public health.

Considering all these elements, the Committee deems that the clinical benefit of LOVENOX (enoxaparin) is insufficient to justify public funding cover in the indication “extended treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE), and prevention of their recurrence(s) in patients with active cancer”.

The Committee issues an unfavourable opinion for inclusion in both the hospital formulary list and the retail formulary list of reimbursed proprietary medicinal products approved for use in the indication “extended treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE), and prevention of their recurrence(s) in patients with active cancer” and at the MA dosages.