We selected patients treated by Opdivo® for a melanoma or a non-small cell lung cancer (NSCLC) and Keytruda® for a melanoma. The patients selected were currently treated with a weight-based dose, then with a flat dose after modification of the SPC. For each patient the economic impact associated with the change of dose was quantified.

In 2018 the European Summary of Product Characteristics (SPC) of Opdivo® (nivolumab) and Keytruda® (pembrolizumab) used in monotherapy were modified: Weight-based doses ➔ Flat doses

We studied the economic impact of these changes in posology at the level of our hospital.

We selected patients treated by:

- Opdivo® for a melanoma or a non-small cell lung cancer (NSCLC)
- Keytruda® for a melanoma

The patients selected were currently treated with a weight-based dose, then with a flat dose after modification of the SPC. For each patient the economic impact associated with the change of dose was quantified.

Estimated annual cost for 28 patients currently treated by Opdivo®

Estimated annual cost for 6 patients currently treated by Keytruda®

Economic impact of the flat doses now recommended ➔ €120 000 a year

The toxicity data with superior doses are reassuring, but no clinical benefit is demonstrated. Benefits on the safety side and on the organisation side with flat doses appear debatable in view of the derived additional costs.

This approach could be applied to the posology of Keytruda® as first line of the NSCLC. A weight-based dose would decrease the cost by €378 000 per year for our hospital, with 11 patients currently treated.