

## COST-MINIMISATION ANALYSIS OF THE USE OF NIVOLUMAB AND PEMBROLIZUMAB

Del Rosario García B<sup>1</sup>, Gutiérrez Nicolás F<sup>1</sup>, Morales Barrios JA<sup>1</sup>, Viña Romero MM<sup>2</sup>, Ramos Santana Emma<sup>1</sup>, Cantarelli L<sup>1</sup>, Oramas Rodríguez J<sup>3</sup>, Nazco Casariego GJ<sup>1</sup>

<sup>1</sup>Servicio de Farmacia. Complejo Hospitalario Universitario de Canarias. <sup>2</sup>Servicio de Farmacia. Hospital Universitario Nuestra Señora De La Candelaria. <sup>3</sup>Servicio de Oncología Médica. Complejo Hospitalario Universitario de Canarias

### BACKGROUND AND IMPORTANCE:

Different studies have shown the equivalence between the dosage regimen for pembrolizumab adjusted to the patient's body weight (DPC: 2 mg/kg/3 week) and the fixed dose (DF: 200 mg/3 weeks); and the equivalence between nivolumab's DF (240 mg/2 weeks) and its DPC (3 mg/kg/2 weeks).

### OBJECTIVES

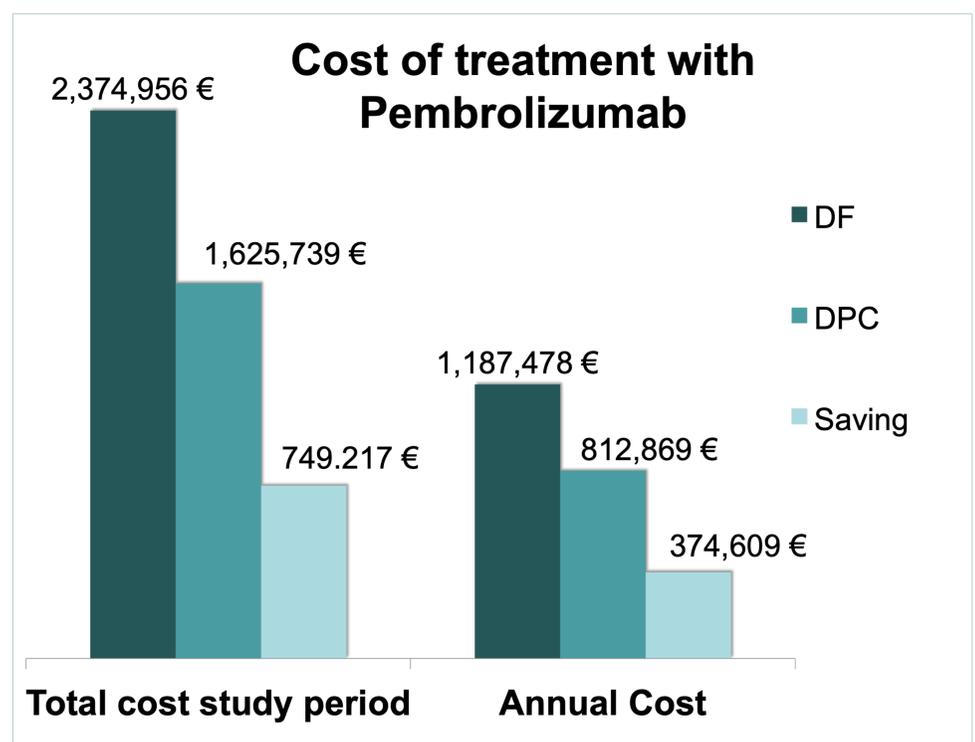
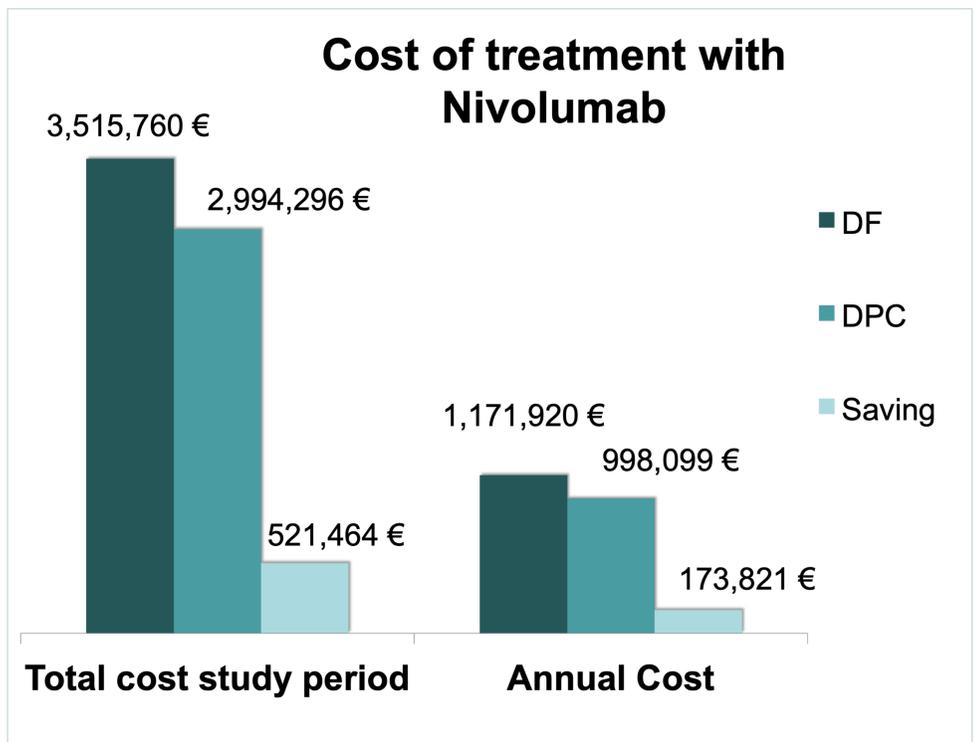
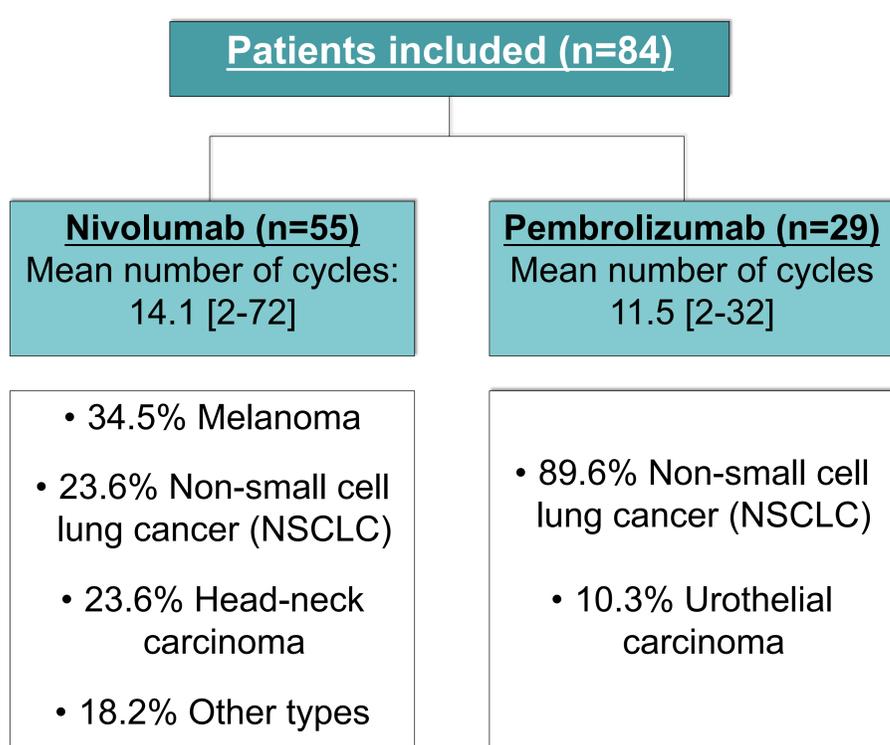
To estimate the savings that would be achieved by using DPC up to maximum doses of 200 mg for pembrolizumab, and 240 mg for nivolumab, in a medical oncology service of a third level hospital.

### MATERIAL AND METHODS

A mathematical model has been developed that includes the cost of pembrolizumab and nivolumab (based on the laboratory's sales price), as well as the anthropometric characteristics of the patients, to estimate the economic impact using a cost minimization analysis, which would have the administration of DF versus DCP for oncological patients.

All those patients who have received pembrolizumab for two years (2018-2020) and nivolumab for three years (2017-2020) were included in the study.

### RESULTS



### CONCLUSIONS AND RELEVANCE

The introduction of the immunotherapy in the oncological field has supposed an improvement in the survival of the patients, but with a relevant economic impact. The search for strategies of this type can help optimize health resources without compromising the effectiveness of treatments.

With the present study we wanted to show one of these strategies that would allow a saving of **23% (548,429 €/year)** in the expenditure associated with pembrolizumab and nivolumab.