



## Correction to: Risk of relapse after anti-PD1 discontinuation in patients with Hodgkin lymphoma

G. Manson<sup>1</sup> · P. Brice<sup>2</sup> · C. Herbaux<sup>3</sup> · M. G. Silva<sup>4</sup> · K. Bouabdallah<sup>5</sup> · B. Deau<sup>6</sup> · J. Bouteloup<sup>7</sup> · J. M. Schiano<sup>8</sup> · E. Nicolas-Virelizier<sup>9</sup> · M. Maerevoet<sup>10</sup> · H. Ghesquieres<sup>11</sup> · A. Stamatoullas<sup>12</sup> · C. Antier<sup>13</sup> · C. Carlo-Stella<sup>14,15</sup> · M. de Charette<sup>3</sup> · F. Poizeau<sup>16,17</sup> · L. Dercle<sup>18,19</sup> · Roch Houot<sup>1</sup>

Published online: 20 March 2021

© Springer-Verlag GmbH Germany, part of Springer Nature 2021

Correction to: Eur J Nucl Med Mol Imaging (2021) 48:1144–1153  
<https://doi.org/10.1007/s00259-020-05015-2>

The authors regret that the abstract that appears in the original article is incorrect.

The correct abstract appears below.

### Introduction

Patients with relapsed/refractory Hodgkin lymphoma (R/R HL) experience high response rates upon anti-PD1 therapy. In these patients, the optimal duration of treatment and the risk of relapse after anti-PD1 discontinuation are unknown.

---

This article is part of the Topical Collection on Erratum

The online version of the original article can be found at <https://doi.org/10.1007/s00259-020-05015-2>

---

✉ Roch Houot  
roch.houot@chu-rennes.fr

<sup>1</sup> Department of Hematology, University Hospital of Rennes, 2 rue Henri Le Guilloux, 35033 Rennes Cedex 9, France

<sup>2</sup> Department of Hematology, Saint-Louis Hospital, AP-HP, Paris, France

<sup>3</sup> Department of Hematology, University Hospital of Lille, Lille, France

<sup>4</sup> Department of Hematology, Instituto Português de Oncologia de Lisboa, Lisbon, Portugal

<sup>5</sup> Department of Hematology, University Hospital of Bordeaux, F-33000 Bordeaux, France

<sup>6</sup> Department of Hematology, Cochin Hospital, Paris, AP-HP, France

<sup>7</sup> Department of Hematology, Chalon Hospital, Chalon-sur-Saone, France

<sup>8</sup> Department of Hematology, Paoli-Calmettes Institute, Marseille, France

<sup>9</sup> Department of Hematology, Leon Berard Center, Lyon, France

<sup>10</sup> Institut Bordet, Université Libre de Bruxelles, Bruxelles, Belgium

<sup>11</sup> Department of Hematology, University Hospital of Lyon, Lyon, France

<sup>12</sup> Department of Hematology, Centre Henri Becquerel, Rouen, France

<sup>13</sup> Department of Hematology, Nantes University Hospital, Nantes, France

<sup>14</sup> Department of Oncology and Hematology, Humanitas Clinical and Research Center – IRCCS, Rozzano, MI, Italy

<sup>15</sup> Department of Biomedical Sciences, Humanitas University, Pieve Emanuele, MI, Italy

<sup>16</sup> Department of Dermatology, Rennes University Hospital, Rennes, France

<sup>17</sup> EA 7449 REPERES (Pharmacoepidemiology and Health Services Research), Rennes 1 University, Rennes, France

<sup>18</sup> UMR1015, Institut Gustave Roussy, Villejuif, France

<sup>19</sup> Department of Radiology, Columbia University Medical Center, New York, NY, USA

## Methods

We retrospectively analyzed patients with R/R HL who responded to anti-PD1 monotherapy and discontinued the treatment either because of unacceptable toxicity or prolonged remission. A machine-learning algorithm based on 17 candidate variables was trained and validated to predict progression-free survival (PFS) landmarked at the time of discontinuation of anti-PD1 therapy.

## Results

Forty patients from 14 centres were randomly assigned to training (n=25) and validation (n=15) sets. At the time of anti-PD1 discontinuation, patients had received treatment for a median duration of 11.2 (range, 0 – 33.5) months. Patients discontinued anti-PD1 treatment either because of prolonged remission (N=27, 67.5%) or unacceptable toxicity (N=13, 32.5%). Most patients were in CR (N=35, 87.5%) at the time of anti-PD1 discontinuation.

In the training set, the machine-learning algorithm identified that the most important variables to predict PFS were patients' age, time to best response, and presence or absence of CR. The performance observed in the training set was validated in the validation set.

## Conclusion

In this pilot, proof of concept study using a machine-learning algorithm, we identified biomarkers capable of predicting the risk of relapse after anti-PD1 discontinuation (age, time to best response, quality of response). Once confirmed, these simple biomarkers will represent useful tools to guide the management of these patients.

**Publisher's note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.