Residual masses after salvage chemotherapy in men with metastatic seminoma: The Semi-ResMass multicenter retrospective study

Giulia Baciarello,1,2, Caroline Brand, Hervé Baumert, Ugo De Giorgi,1 Aude Flechon,2 Patrizia Giannatempo,1 Gwenaëlle Gravisi,2 Franco Morelli,2 Damien Pousse,3 Bruno Vincenzi4, Christoph Ong5, Simona Secondino,2, Aditya Bagrodia1, Sylvain Ladoire, Laurent Crouzet6, Natacha Naou1, Stephanie Foulon7, Karim Fizazi1


DATA FROM 92 PATIENTS (pts) WITH NON-PROGRESSING RESIDUAL MASSES AFTER SECOND-LINE CHEMOTHERAPY HAVE BEEN COLLECTED AND HAVE BEEN INCLUDED IN THIS ANALYSIS. A POST-CHEMOTHERAPY FDG PET/CT WAS PERFORMED IN 54 (59%) pts. Viable seminoma was found in 3/12 pts who had a biopsy (bio+). Surgery was performed in 47 (51%) pts, irrespectively of FDG uptake (no+bio+). Complete necrosis was found in 42 (89%), viable seminoma in 3 (6%), teratoma in 1, and leiomyoma in 1 pt, respectively. No viable tumor cells were found in 8 pts with a negative PET (PET−) who underwent surgery (2bio−). 16/28 pts with a positive PET (PET+) underwent surgery: 12 complete necrosis, 2 viable seminoma, 1 teratoma, and 1 leiomyoma. Among those with a PET+, 5/28 pts (18%) experienced either viable seminoma in residual subsequent relapse. A second relapse occurred in 13/92 (14%). Only 4/47 (8%) pts who had residual masses resected post 1st salvage chemotherapy subsequently relapsed (had viable seminoma in the residual). At a median follow-up of 4.35 years, 88 (92%) pts were alive. 5/92 patients died of cancer progression.

Overall population n=92

<table>
<thead>
<tr>
<th>Pts with a post-chemotherapy PET/CT evaluation</th>
<th>Pts without a post-chemotherapy PET/CT evaluation</th>
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<tbody>
<tr>
<td>PET+</td>
<td>28/54</td>
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<tr>
<td>PET−</td>
<td>9/54</td>
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Residual Mass Surgery post 2 line chemotherapy

Histological report

Complete necrosis 47

Partial necrosis 3

Viable 3

Teratoma 3

Leiomyoma 1

Others 1

Seco ndary relapse 13

Table 1. Characteristics of patients after 2nd line chemotherapy

CONCLUSIONS

Most men with seminoma residual masses after 1st salvage chemotherapy may achieve a cure. Pending validation with more pts in this rare situation, FDG PET/CT may help guide the selection of post-chemotherapy resection candidates. PET/CT appears of high negative predictive value when negative (90% [95%CI 63-100]), while PET+ scans have a remarkable risk of being false positive (positive predictive value 16% [95%CI 3-40]).

Figure 1. Characteristics of the pts

Table 2. Characteristics of the pts

Viable seminoma 7%

Teratoma 2%

Other 2%

Histological report (n=47)

Complete necrosis 89%

Figure 1. Histological report after salvage chemotherapy.