

## AB004. OS01.04. Prevalence of autoimmune diseases in thymic epithelial tumors insights from RYTHMIC

Marie-Eve Boucher<sup>1</sup>, Eric Dansin<sup>2</sup>, Mallorie Kerjouan<sup>3</sup>, Julien Mazieres<sup>4</sup>, Eric Pichon<sup>5</sup>, François Thillays<sup>6</sup>, Gilbert Massard<sup>7</sup>, Xavier Quantin<sup>8</sup>, Youssef Oulkhour<sup>9</sup>, Virginie Westeel<sup>10</sup>, Luc Thiberville<sup>11</sup>, Christelle Clement-Duchene<sup>12</sup>, Franck Morin<sup>13</sup>, Pascal Thomas<sup>14</sup>, Nicolas Girard<sup>15</sup>, Benjamin Besse<sup>1</sup>

<sup>1</sup>Medical Oncology Department, Gustave Roussy, Villejuif, France;

<sup>2</sup>Thoracic Oncology Department, Oscar Lambret, Lille, France;

<sup>3</sup>Department of Pulmonology, Centre Hospitalier Universitaire de Rennes, Rennes, France; <sup>4</sup>Department of Pulmonology, Centre Hospitalier Universitaire de Toulouse, Toulouse, France;

<sup>5</sup>Department of Pulmonology, Hôpital Bretonneau, Tours, France;

<sup>6</sup>Radiation Oncology Department, Institut de Cancérologie de l'ouest, Rouen, France; <sup>7</sup>Thoracic Surgery Department, Centre Hospitalier Universitaire de Strasbourg, Strasbourg, France;

<sup>8</sup>Department of Pulmonology and Addictology, Centre Hospitalier Universitaire de Montpellier, Montpellier, France; <sup>9</sup>Department of Pulmonology, Centre Hospitalier Universitaire de Caen, Caen, France;

<sup>10</sup>Department of Pulmonology, Centre Hospitalier Universitaire de Besancon, Besancon, France; <sup>11</sup>Department of Pulmonology, Centre Hospitalier Universitaire de Rouen, Rouen, France; <sup>12</sup>Medical

Oncology Department, Institut de Cancérologie de Lorraine, Nancy, France; <sup>13</sup>Clinical Research Department, Intergroupe francophone

de cancérologie thoracique, Paris, France; <sup>14</sup>Thoracic Surgery Department, Hôpital Nord, Marseille, France; <sup>15</sup>Medical Oncology Department, Université Lyon 1, Institut Curie, Paris, France

**Background:** Thymic epithelial tumor (TET) has been associated with autoimmune disorders (AID) in up to 30% of patients. However, there have been wide variations in the

reported prevalence of TET associated disorders based mostly on small single center series. RYTHMIC (Réseau tumeurs THYMIques et Cancer) is a French network mandated to systematically discuss every case of TET. Using our database, we aimed to describe the prevalence of AID in a large French TET population.

**Methods:** RYTHMIC database prospectively includes all consecutive patients with a diagnosis of TET discussed in our national tumor board. We calculated the prevalence and described epidemiologic, clinical and pathological characteristics of patients with TET's related autoimmune diseases.

**Results:** From January 2012 to May 2017, 1,581 patients were included in the registry. Of these, 312 patients (19.7%) had autoimmune disorder. The mean age at diagnosis of TET was 56 years old and 52% were female. 233 had myasthenia gravis (65.8%), 19 Good syndrome (5.4%), 17 thyroiditis (4.8%), 16 systemic erythematous lupus (4.5%) and 14 pure red cell aplasia (4%). Some patients (10.3 %) eventually developed more than 1 AID. Considering histologic characterization, 42.9% were B2 subtype, 17.1% AB subtype, 16.1% B3 subtype, 12.1% B1 subtype, 3.6 % thymic carcinoma and 3.6% A subtype.

**Conclusions:** In our database of TET, the prevalence of autoimmune diseases was 11.8%, mostly in patients with B2, AB and B3 subtypes. This significant prevalence means that physicians must keep high awareness and systematically search for those comorbidities.

**Keywords:** Autoimmune diseases; thymoma

doi: 10.21037/med.2017.AB004

**Cite this abstract as:** Boucher ME, Dansin E, Kerjouan M, Mazieres J, Pichon E, Thillays F, Massard G, Quantin X, Oulkhour Y, Westeel V, Thiberville L, Clement-Duchene C, Morin F, Thomas P, Girard N, Besse B. Prevalence of autoimmune diseases in thymic epithelial tumors insights from RYTHMIC. Mediastinum 2017;1:AB004. doi: 10.21037/med.2017.AB004