



# Autoimmune Diseases Working Party

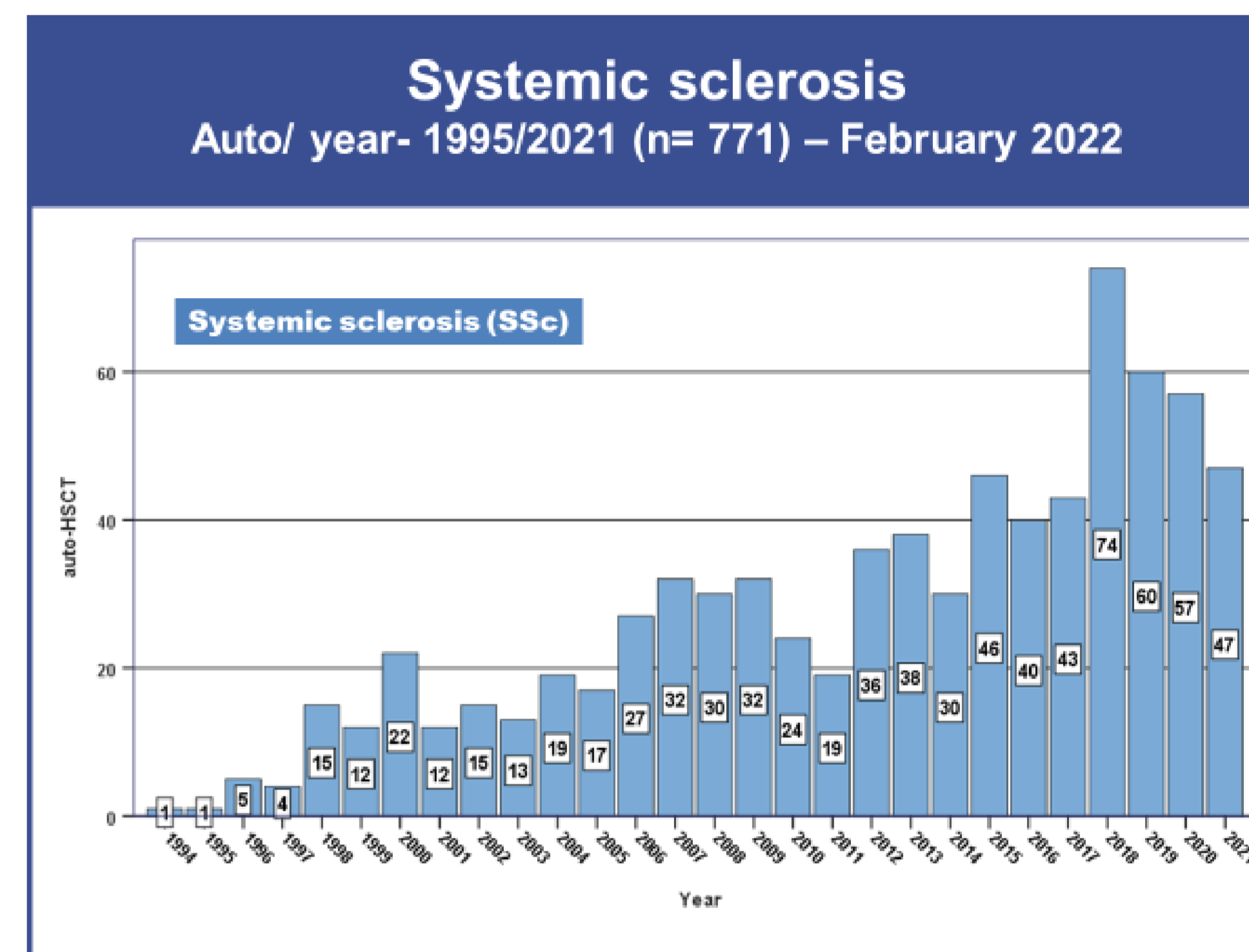
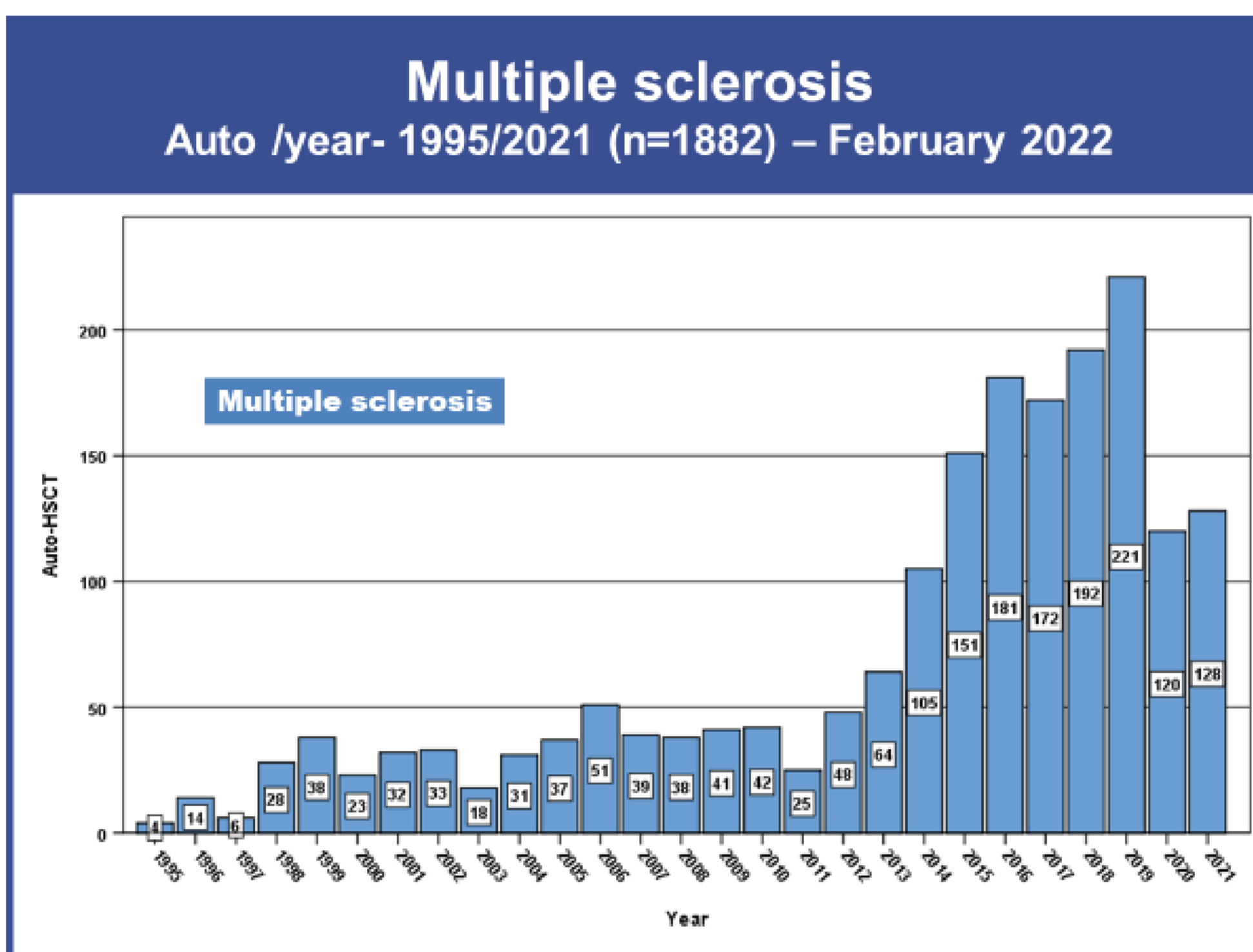
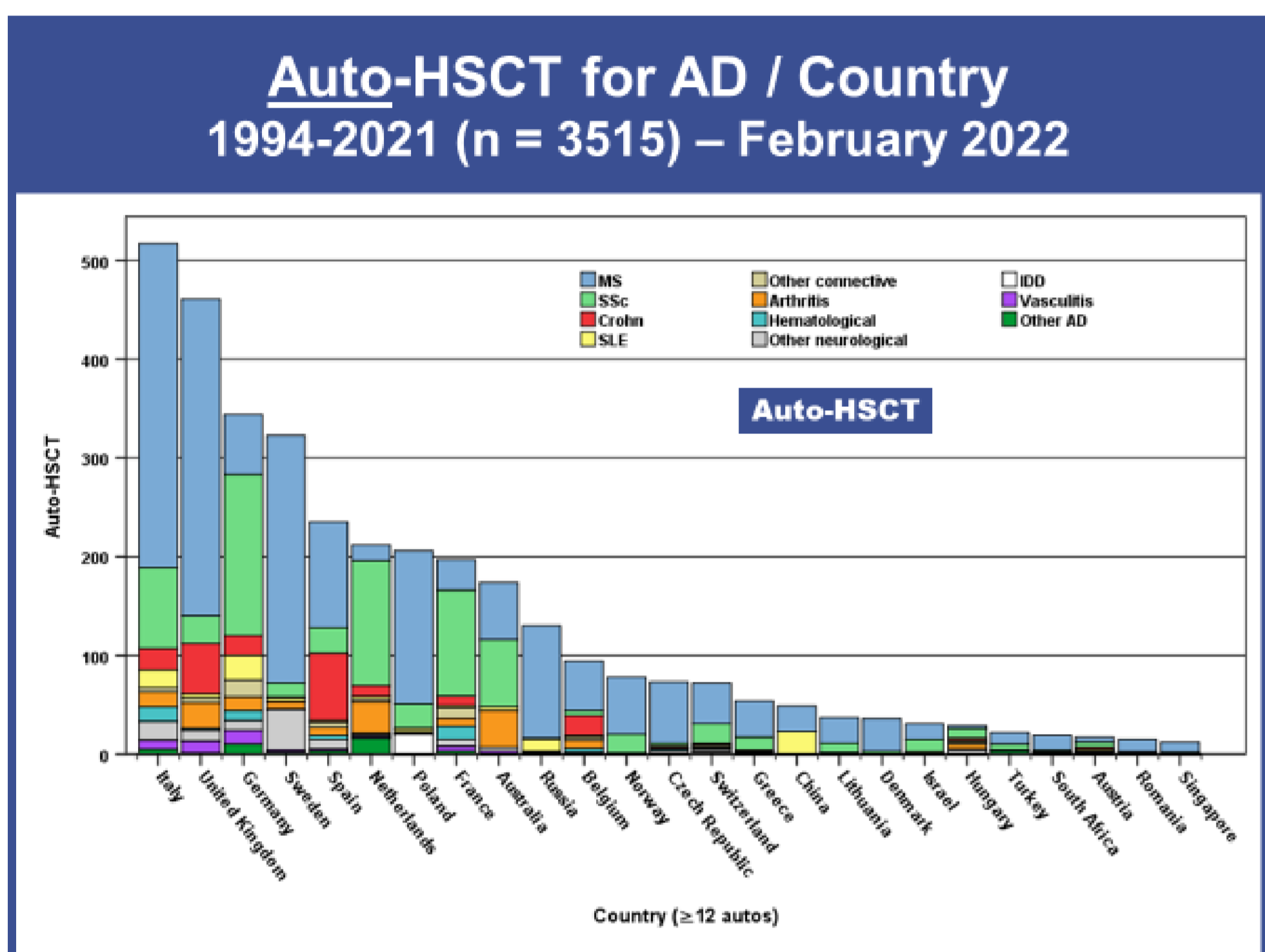
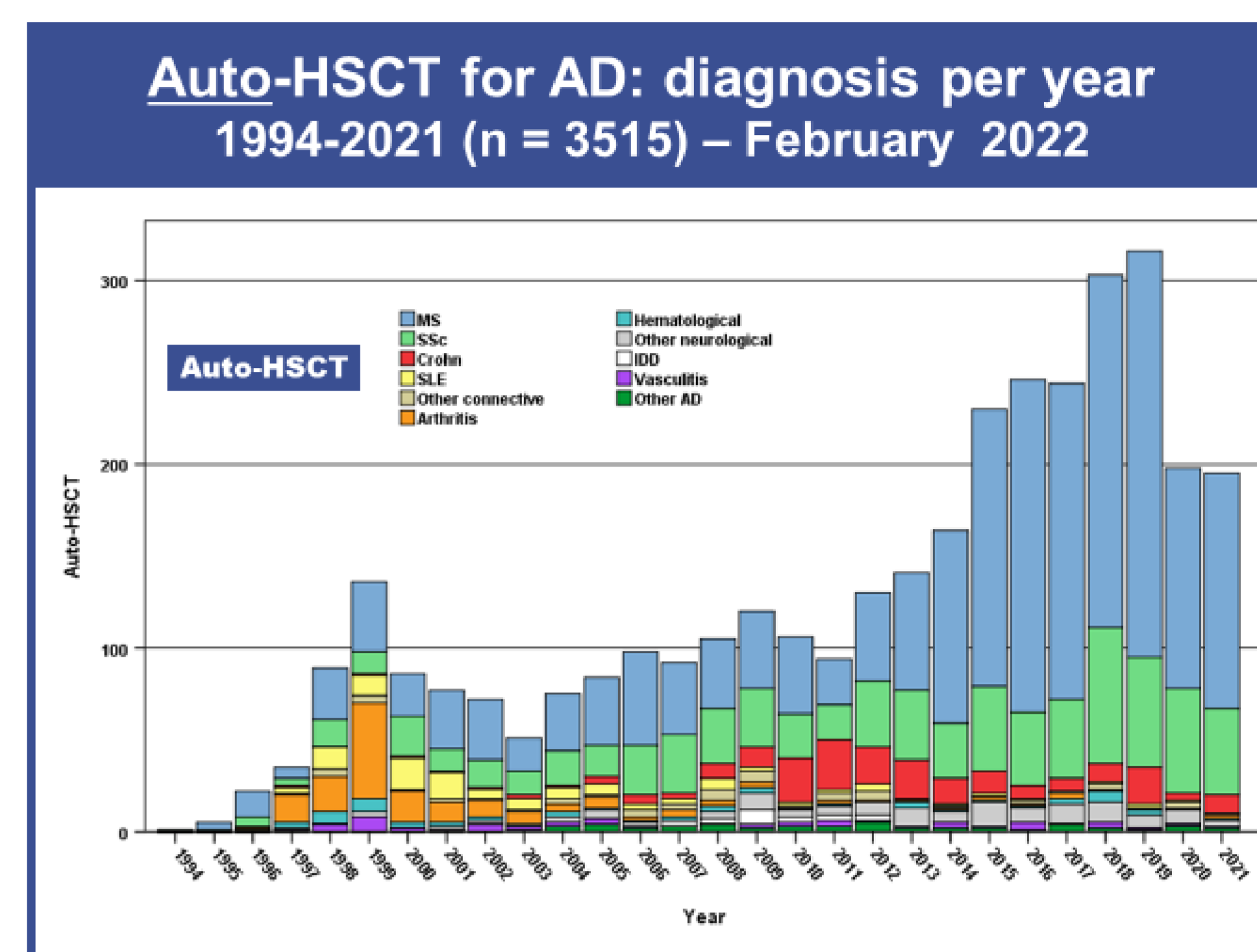
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 Tobias Alexander, ADWP Secretary  
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## Number of HSCT for Autoimmune Diseases: 3789 EBMT Registry – February 2022

ADWP - Number of HSCT: 3789 EBMT Registry – February 2022	
Transplant procedures	3789
Patients	3710
Male/Female %	40/60
Paediatric/Adult %	9/91
Centres/Countries	315/44
Overall follow up (alive, median)	3y (<1-24)

	Autografts n=3526	Allografts n=263
First	3493	217
Second	31	39
Third	2	6
Median age at 1st transplant	38y (3-76)	11y (<1-64)

ADWP - Number of HSCT: 3789 EBMT Registry – February 2022	
▶ <b>MULTIPLE SCLEROSIS</b>	1896
▶ <b>CONNECTIVE TISSUE</b>	960
SSc	775
SLE	121
PM-DM	18
Sjogren	6
Antiphosph. Syndrome	6
Other/Unknown	34
▶ <b>ARTHRITIS</b>	206
Rheumatoid arthritis	84
Juvenile chronic arthritis:	
*Systemic JIA	71
*Other JIA	19
*Polyarticular JIA	21
Psoriatic arthritis	3
Other	8
▶ <b>INFLAMMATORY BOWEL</b>	275
Crohn's disease	226
Coeliac disease type 2	18
Other	27
▶ <b>HAEMATOLOGICAL</b>	145
ITP	38
AIHA	31
Evans'	23
Other	53
▶ <b>VASCULITIS</b>	66
Wegener's	12
Behcet's	3
Takayasu	6
Polyarteritis	4
Churg-Strauss	2
Other/Unknown	29
▶ <b>OTHER NEUROLOGICAL</b>	141
NMO	27
CIDP	64
Myasthenia gravis	10
Other/Unknown	40
▶ <b>INSULIN DEPENDENT DIABETES</b>	20
▶ <b>OTHER</b>	80



## Principal research studies

- 1- MS Comparison of CYC+ATG vs. BEAM+ATG conditioning regimens in autologous HSCT for MS
- 2- NISSC II: Post-AHSCT management and mechanistic immunological reconstitution for patients with systemic sclerosis
- 3- Late complications after autologous HSCT for Autoimmune Diseases
- 4- Viral reactivations: retrospective study on viral infections post auto-HSCT in Autoimmune Diseases
- 5- Indications and outcomes of re-transplantation for Autoimmune Diseases
- 6- Prospective non-interventional on patients with multiple sclerosis (OMST).

### Disease-specific retrospective studies of autologous HSCT

- Immune cytopenias
- Rare neurological diseases (CIDP, Stiff Person Syndrome, myasthenia gravis, NMO and others,
- Juvenile and adult systemic arthritis/Still's disease
- Polymyositis-Dermatomyositis

### Surveys

- Survey of national provision/reimbursement of HSCT and follow up in Autoimmune Diseases

### Guidelines and recommendations

- HSCT in adult rheumatological autoimmune diseases : guidelines and recommendations from the EBMT ADWP in collaboration with European Reference Network (ERN) for rare and complex connective tissue diseases (ERN ReCONNET)
- Position paper with European Academy of Neurology EAN/ECTRIMS and EBMT

### Prospective long-term follow of studies involving EBMT registry

- Harmonisation of long-term follow-up of clinical trials in MS (EBMT involvement TBC)

## Key publications

- **Hematopoietic stem cell transplantation for autoimmune diseases in the time of COVID-19: EBMT guidelines and recommendations.** Greco R, et al; European Society for Blood and Marrow Transplantation (EBMT) Autoimmune Diseases Working Party (ADWP), Infectious Diseases Working Party (IDWP), Pediatric Working Party (PWP), Joint Accreditation Committee of the International Society for Cellular Therapy (ISCT) and EBMT (JACIE), EBMT Nurses Group and Patient Advocacy Committee. *Bone Marrow Transplant.* 2021 Jul;56(7):1493-1508
- **Hematopoietic Stem Cell Transplantation for Autoimmune Disease.** Alexander T, et al. *Annu Rev Med.* 2021 Jan 27;72:215-228.
- **Autologous stem cell transplantation for progressive systemic sclerosis: a prospective non-interventional study from the European Society for Blood and Marrow Transplantation Autoimmune Disease Working Party.** Henes J, et al. *Haematologica.* 2021 Feb 1;106(2):375-383
- **Intestinal microbiome in hematopoietic stem cell transplantation for autoimmune diseases: considerations and perspectives on behalf of Autoimmune Diseases Working Party (ADWP) of the EBMT.** Tobias A et al. *Front. Oncol.*, 22 October 2021
- **Autologous Hematopoietic Stem Cell Transplantation for Behçet's Disease: A Retrospective Survey of Patients Treated in Europe, on Behalf of the Autoimmune Diseases Working Party of the European Society for Blood and Marrow Transplantation.** Puyade M, et al. *Front Immunol.* 2021 May 6;12:638709
- **Immune Reconstitution Following Autologous Hematopoietic Stem Cell Transplantation for Multiple Sclerosis: A Review on Behalf of the EBMT Autoimmune Diseases Working Party.** Cencioni MT et al. *Front Immunol.* 2021; 12: 813957

## Major achievements

Over the last 25 years, hematopoietic stem cell transplantation (HSCT) has been increasingly used to treat patients affected by severe and refractory autoimmune diseases (ADs).

The EBMT Autoimmune Diseases Working Party has been central to development of this approach, with over 3,600 HSCT registrations for ADs

The ADs section of the EBMT Registry is the largest database of its kind worldwide. Recent data have improved the evidence base to support autologous HSCT in multiple sclerosis, systemic sclerosis, and Crohn's disease, along with a wide range of rarer disease indications, and autologous HSCT has become an integral part of treatment algorithms in various ADs, providing treatment-free remissions by the reinduction of self-tolerance. A multidisciplinary approach is key in this field, and the ADWP is continuing to expand the evidence-base and support best practice with studies and guidelines, including significant collaborative outputs with other EBMT Working Parties, JACIE, and the EBMT Nurses Group.

Education is central in ADWP activities. A successful and comprehensive ADWP Educational Meeting was held on a virtual platform, due to the ongoing Covid-19 pandemic.

Moreover, a section specifically designed for ADs was developed within the EBMT e-learning platform, covering all important aspects of HSCT in relation to the pathophysiology and therapy of ADs, including current and future indications, immunological mechanisms and novel targets.