New Report Launched at ECTRIMS 2017 Highlights Unique Impact of MS on Women in Europe

- Multiple sclerosis diagnosis has a profound impact on life choices including education, career, family planning and relationships
- Almost 90% of women say multiple sclerosis played a role in their separation or divorce following diagnosis
- Policy interventions could help address significant gender-specific challenges

Darmstadt, Germany, October 25, 2017 – Merck KGaA, Darmstadt, Germany, a leading science and technology company, will present results of a new report investigating the socioeconomic impact of multiple sclerosis (MS) on Women in Europe, today at the 7th Joint ECTRIMS-ACTRIMS Meeting, in France. Results from the report include evidence of the full range of impacts that MS has on the lives of women, their families and their role in society.

“Evidence shows that although women are twice as likely to receive a diagnosis of multiple sclerosis than men, the gender-specific burden of the disease in women has received less attention and needs further research and understanding,” said Raj Kannan, Senior Vice President, Global Head of Neurology and Immunology, at the biopharma business of Merck KGaA, Darmstadt, Germany. “Merck KGaA, Darmstadt, Germany, commissioned this report to address the specific challenges that multiple sclerosis imposes on women.”

The report involved a three-step process: a review of existing literature; an interview program with patient organizations; and a bespoke survey among 807 women with MS across eight countries in Europe including: Czech Republic, France,
Germany, Italy, Poland, Spain, Sweden and the UK; with an aim to investigate the many ways MS affects the life choices of female patients. The report also looked at sources and types of support, unmet needs in the community, and considered whether there are policy implications that would improve the environment for women with MS.

The report found that there is a disproportionate impact of MS on women versus men particularly in terms of diagnosis and co-morbidities, life choices and relationships, caregiving and employment. In addition, there is to-date, little recognition of this specific impact on women and, in many areas, little support to mitigate these burdens. Key findings of the report included:

**Being diagnosed with MS is challenging for women**
An average diagnosis of MS in women requires around half a year and five visits to healthcare professionals. Over one-fifth (21%) of women surveyed for the report were misdiagnosed with a different illness prior to being diagnosed with MS. The delay to a definitive diagnosis of MS can adversely impact both the longer-term course of the disease and quality of life; as early intervention in MS ultimately means better outcomes. Overall delays in diagnosis also create a period of uncertainty, affecting emotional states and life decisions including careers, family and social relationships.

**MS has an impact on the life choices that women make regarding relationships and family planning**
The report revealed that, since being diagnosed with MS, over two-fifths (41%) of women surveyed had separated or divorced from their partner. Of these women, the vast majority (88%) reported that MS had played a factor in their decision. Furthermore, on average, over one third (36%) surveyed, either decided not to have any, or altered the timing at which they had children. This decision is also compounded by availability of treatment choice, particularly pre- and post-pregnancy.

**MS has an impact on the role of women as a primary caregiver**
Of the number of women surveyed for the report, 69% of those that had caregiving responsibilities experienced diminished ability to maintain this role due to the
disease. This lost or reduced ability to care for others is an impactful issue for women, causing emotional distress particularly if related to childcare, and can also have a significant impact on the children and other family members involved.

**MS imposes a significant economic cost on women with MS**

Almost two-thirds (66%), of women surveyed reported that MS had, at some point, affected their employment status. Of these women, two fifths (38%) had left employment altogether. As a result, those with MS are much more likely to have a ‘below average’ household income. Due to these impacts and given the higher prevalence of MS among women, the employment losses are substantial, compared to men.

**Awareness building, and policy intervention to address challenges of MS for women are a critical first step**

Improved public understanding and awareness, is regarded as critical by women with MS. Many women report adverse reactions from their friends and co-workers, which can lead to feelings of exclusion and discrimination. Furthermore, specific policy interventions could be considered to improve understanding and awareness, and ensure that women with MS get the best support to help them with diagnosis, family, social and daily life and in the workplace, as well as to reduce the broader societal impact linked to these challenges.

Further insight into the socioeconomic impacts and gender-specific issues, also covered in the report, including life choices (education, career, family planning), employment, social and family interactions, country comparisons and policy implications can be found in the wider report available at [http://media.emdserono.com/press_releases](http://media.emdserono.com/press_releases)

**About ‘The Socioeconomic Impact of MS on Women in Europe’ Report**

The report, commissioned by Merck KGaA, Darmstadt, Germany, and undertaken by Charles River Associates, London, UK was carried out in a three step approach in collaboration with MS associations, across eight markets: Czech Republic; France; Germany; Italy; Poland; Spain; Sweden and the UK. The countries included cover 72 percent of the total European population with MS, and 77 percent of the estimated number of women with MS in Europe.

The approach to the report involved a literature review; a second step, to capture the local challenges and policy debate in different markets, in a targeted interview program with national patient associations and patient representatives; and third and final step, of an online survey of 807 women with MS across the eight European countries of interest designed with the input of national and European MS patient associations, sought to collect socioeconomic data to illustrate the impact of MS on women and to identify any unmet policy needs.
About Multiple Sclerosis
Multiple sclerosis (MS) is a chronic, inflammatory condition of the central nervous system and is the most common, non-traumatic, disabling neurological disease in young adults. It is estimated that approximately 2.3 million people have MS worldwide. While symptoms can vary, the most common symptoms of MS include blurred vision, numbness or tingling in the limbs and problems with strength and coordination. The relapsing forms of MS are the most common.

About Merck KGaA, Darmstadt, Germany
Merck KGaA, Darmstadt, Germany, is a leading science and technology company in healthcare, life science and performance materials. Around 50,000 employees work to further develop technologies that improve and enhance life – from biopharmaceutical therapies to treat cancer or multiple sclerosis, cutting-edge systems for scientific research and production, to liquid crystals for smartphones and LCD televisions. In 2016, Merck KGaA, Darmstadt, Germany, generated sales of € 15.0 billion in 66 countries. Founded in 1668, Merck KGaA, Darmstadt, Germany, is the world’s oldest pharmaceutical and chemical company. The founding family remains the majority owner of the publicly listed corporate group. Merck KGaA, Darmstadt, Germany, holds the global rights to the “Merck” name and brand. The only exceptions are the United States and Canada, where the company operates as EMD Serono, MilliporeSigma and EMD Performance Materials.