The global incidence and prevalence of multiple myeloma over the next 10 years (2017-2027)

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Objective: The objective of this study was to estimate the global incidence and prevalence of multiple myeloma by region over the next 10 years using a multi-factorial forecast model.

Methods: Using a critically appraised set of country-specific cancer registries, multiple myeloma incidences were estimated for 45 countries, representing approximately 90% of the world population in 2017. Observed correlations between GDP, multiple myeloma risk, and survival were used to trend multiple myeloma incidence over the next 10 years. Multiple Myeloma survival was trended using an attenuated function of historical trends and factoring in the anticipated uptake of newer, more efficacious treatment regimens in the future. Prevalence was estimated as a cumulative incidence over preceding 20 years with adjustments for disease-specific and competing-cause mortality for each year. To estimate incident and prevalent multiple myeloma globally, aggregate estimates for each region were divided by the proportion of countries in that region for which direct estimates were made using the methods described above. The incident cases were also reported by the symptomatic status, as treatment guidelines are based this, thus are important to initiate treatment for a patient.

Results: The incidence of multiple myeloma in Africa, Latin America, lower-income Asia Pacific countries, high-income Asia Pacific countries, Europe, and North America is 1, 2, 2, 5, 7 and 8 cases per 100,000/year. The prevalence of multiple myeloma in Africa, Latin America, lower-income Asia Pacific countries, high-income Asia Pacific countries, Europe, and North America is 4, 8, 7, 19, 25, and 32 cases per 100,000. Lower-Income Asia Pacific is expected to see the highest growth in prevalent cases over the next ten years: 71% by 2027.

Conclusion: The incidence and prevalence of multiple myeloma is expected to increase globally. Improvements in the survival of multiple myeloma patients and ageing of population of will result in 325 thousand additional cases surviving by 2027 worldwide.

Biography
Atul Sharma is an Associate Epidemiologist in the Epidemiology team at Decision Resources Group with an expertise in Cancer Epidemiology. He has a Bachelor’s degree in Dental Surgery from Himachal Pradesh University, India and a Master’s degree in Public Health from PGIMER, India. He specializes in developing epidemiological forecasts for the multiple indications within the DRG syndicated portfolio. His field of interest lies in the oncology.

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