NEW CANCER DRUGS INCLUDED IN THE 2019 EML

Drug	Treatment Purpose	Reason for inclusion in the EML	Manufacturer	Applicant (s)
Nivolumab	Front-line monotherapy in patients with unresectable and	Both medicines demonstrated highly relevant increases in overall survival and represent the first medicines on the EML for metastatic melanoma.	Bristol-Myers Squibb Company	European Society for Medical Oncology
Pembrolizumab	metastatic melanoma.		Merck & Co	European Society for Medical Oncology
Bortezomib	Treatment of patients with newly-diagnosed	These medicines demonstrated large improvements in survival with acceptable safety and represent the	Takeda	Dr Vanessa Piechotta, Dr Marius Goldkuhle, Prof Christof Scheid, Dr Nicole
Lenalidomide	multiple myeloma in both non-transplant	first medicines on the EML for multiple myeloma.	Celgene	Skoetz University Hospital of Cologne
Thalidomide	and transplant eligible/available settings.		Celgene	Cochrane Cancer
Melphalan			Spectrum Pharmaceuticals	
Erlotinib (with afatinib and gefitinib as therapeutically equivalent alternatives)	Front-line treatment of EGFR mutation positive advanced non- small cell lung cancer	These medicines demonstrated relevant survival benefits (similar to that of cytotoxic chemotherapy) and offer better toxicity profiles and improved quality of life compared to chemotherapy.	Roche Astellas	Dr Sumitra Thongprasert, Faculty of Medicine, Chiang Mai University/ Excellent, Bangkok Hospital, Chiang Mai, Thailand
Abiraterone	Treatment of patients with metastatic castration- resistant prostate cancer.	Abiraterone demonstrated relevant survival benefits for patients and an acceptable safety profile. It is associated with potential advantages in terms of emerging dosing strategies, lower pill burden and availability of generics which would be associated with cost-savings compared to similarly effective enzalutamide. Enzalutamide was not recommended for listing on the EML.	Janssen Biotech	Knowledge Ecology International
Arsenic trioxide (oral and IV formulations)	Treatment of patients with acute promyelocytic leukaemia	Arsenic-containing regimens were associated with less toxicity, high response rates and greater survival benefits compared to standard regimens.	Teva Pharmaceutical Industries	Scott C. Howard, Professor, University of Tennessee Health Science Center Secretary General, International Pediatric Oncology Society
Pegaspargase	Treatment of patients with acute promyelocytic leukaemia	Pegaspargase was recommended for treatment of patients with acute lymphoblastic leukaemia as it is associated with less immunogenicity and antibody development compared to asparaginase.	Shire plc	Scott C. Howard, Professor, University of Tennessee Health Science Center Secretary General, International Pediatric Oncology Society

Note: Excerpted from the full WHO model list of essential medicines (21st list) 2019 available at: https://apps.who.int/iris/handle/10665/325771