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ERRATUM

Erratum to: Microsatellite instability in colorectal cancer: from molecular oncogenic mechanisms to clinical implications

Aziz Zaanan · Katy Meunier · Fatiha Sangar · Jean-François Fléjou · Françoise Praz

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In the above mentioned review two errors in the legend of Fig. 1 has escaped the author's attention during proofreading. The correct legend of Fig. 1 should read:

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A. Zaanan · K. Meunier · F. Sangar · J.-F. Fléjou · F. Praz
INSERM, UMR_S 938, Centre de Recherche Saint-Antoine,
75012 Paris, France

A. Zaanan · K. Meunier · F. Sangar · J.-F. Fléjou · F. Praz
UPMC Univ Paris 06, UMR_S 938,
Centre de Recherche Saint-Antoine,
75012 Paris, France

A. Zaanan
Service d'Oncologie Médicale, Hôpital Saint-Antoine,
Assistance Publique–Hôpitaux de Paris,
75012 Paris, France

K. Meunier
Service de Chirurgìe Oncologique, Centre Paul Papin,
Angers, France

J.-F. Fléjou
Service d'Anatomie et Cytologie Pathologique,
Hôpital Saint-Antoine, Assistance Publique–Hôpitaux de Paris,
75012 Paris, France

F. Praz (✉)
Centre de Recherche Saint-Antoine,
INSERM UMRS_938-UPMC,
184 rue du Faubourg Saint-Antoine,
75571 Paris, Cedex 12, France
e-mail: Francoise.Praz@inserm.fr

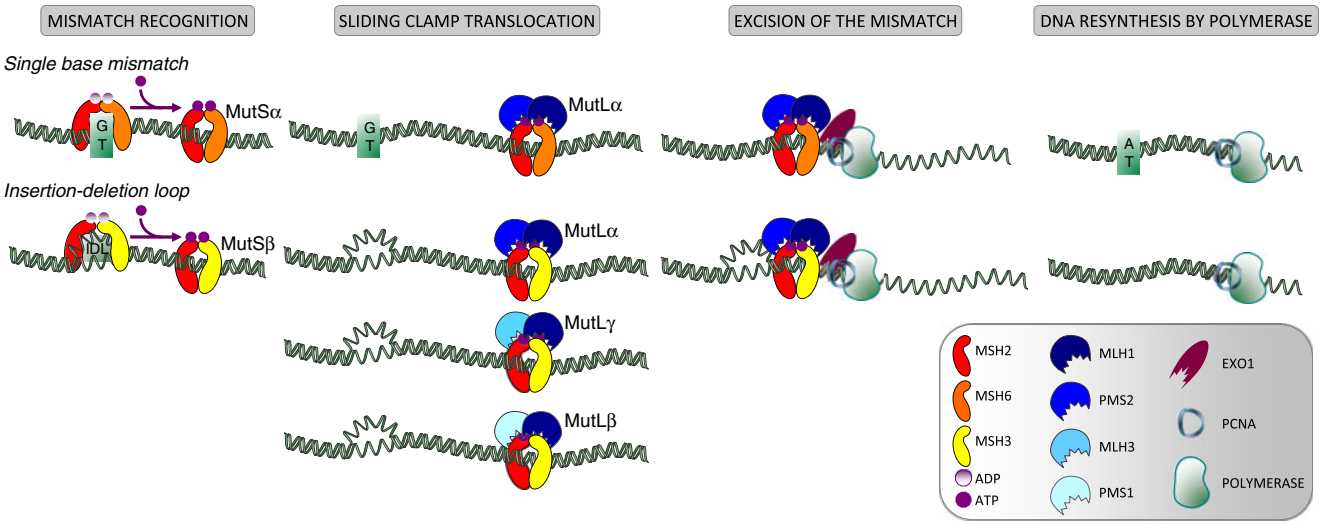

Fig. 1 Eukaryotic DNA mismatch repair. Single nucleotide mismatches, as well as 1 nucleotide loops typically occurring at microsatellite mononucleotide repeated sequences, are recognized by the MutSα heterodimer formed by MSH2 and MSH6; this complex binds to DNA as a sliding clamp after MSH2 ADP has been exchanged for ATP (upper panel). The heterodimer MutLα, formed by MLH1 and PMS2, then binds to MutSα. The MutSα-MutLα complex moves along the DNA until it meets the DNA polymerase complex, PCNA and Exo I. The exonuclease then removes up to several hundred bases from the newly synthesized DNA strand, to allow correct resynthesis of DNA by the replicative polymerase. IDL of two or more nucleotides are preferentially recognized by the MutSβ complex, formed by MSH2 and MSH3 (lower panel). After binding to DNA, MutSβ exchanges ADP for ATP and recruits the MutLα complex, a heterodimer of MLH1 and PMS2 heterodimer. Subsequently, excision and resynthesis are performed as described for the repair of single base mismatches. MLH1 may also form heterodimers with MLH3 and PMS1 to form respectively the MutLγ and MutLβ complexes, but their roles in human MMR function are not entirely clear