

Supplementary data

1. *In vitro* drug metabolism of DMB

1.1. Identification of dubermatinib *in vitro* phase I metabolites

1.1.1. Identification of the DMB M2 metabolites

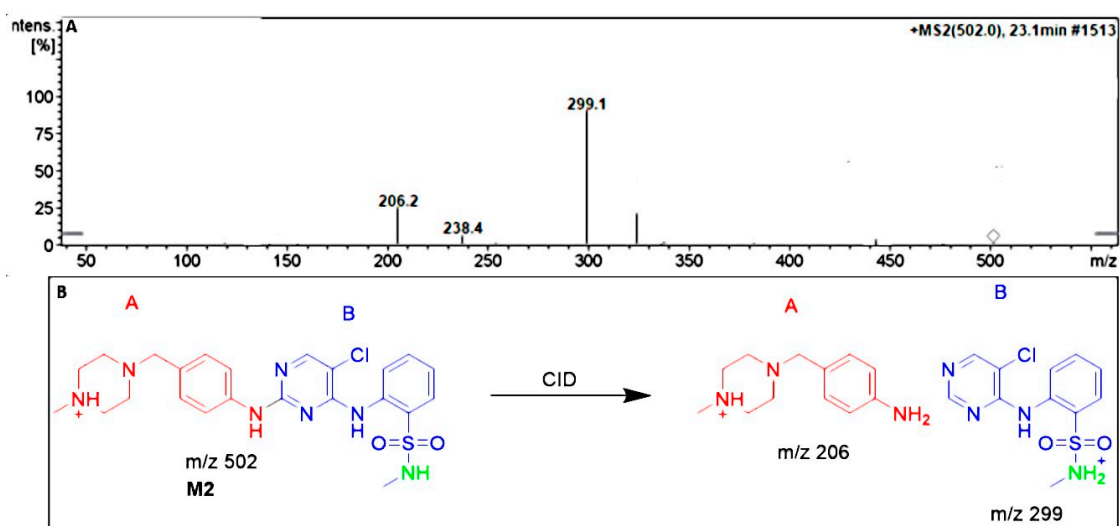


Figure S1. Positive ion MS/MS mass spectrum of M2 at 23.1 min (A). Proposed structural formulas of M2 and corresponding MS/MS fragments (B).

1.1.2. Identification of the DMB M3 metabolite

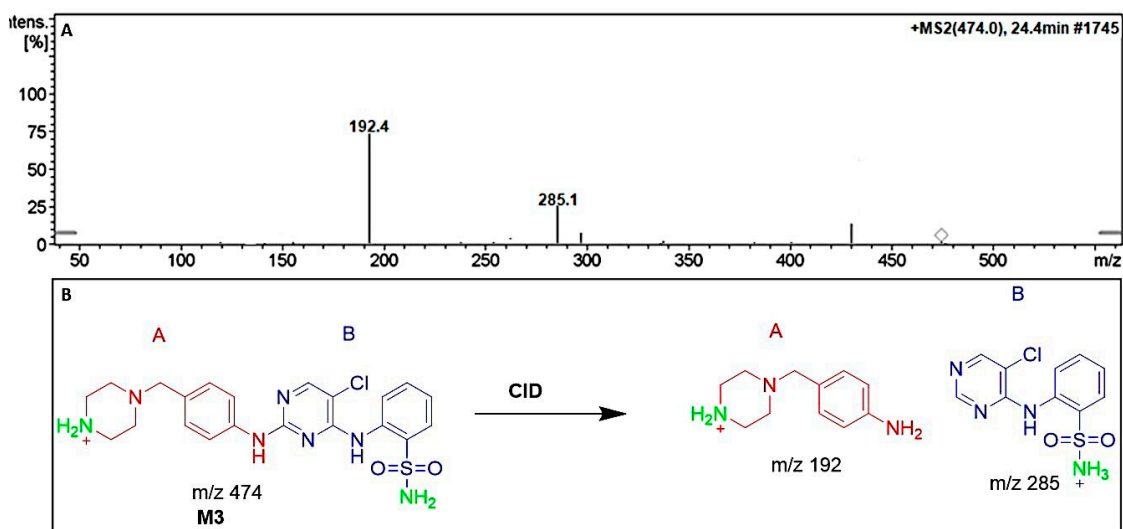


Figure S2. Positive ion MS/MS mass spectrum of M3 at 24.4 min (A). Proposed structural formulas of M3 and corresponding MS/MS fragments (B).

1.1.3. Identification of the DMB M4 metabolite

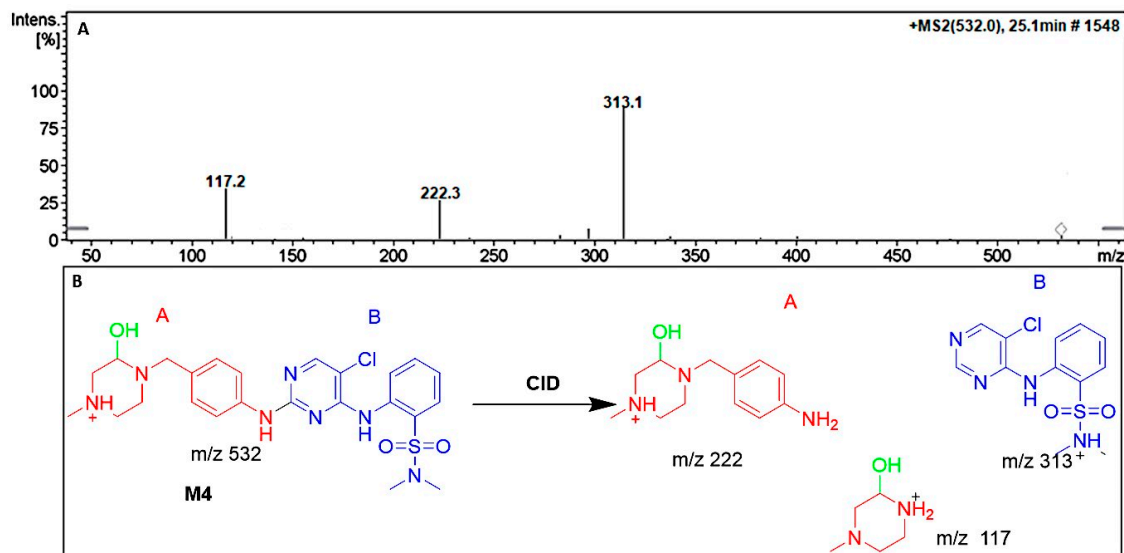


Figure S3. Positive ion MS/MS mass spectrum of M4 (A). Proposed structural formulas of M4 and corresponding MS/MS fragments (B).

1.1.4. Identification of the DMB M5 metabolite

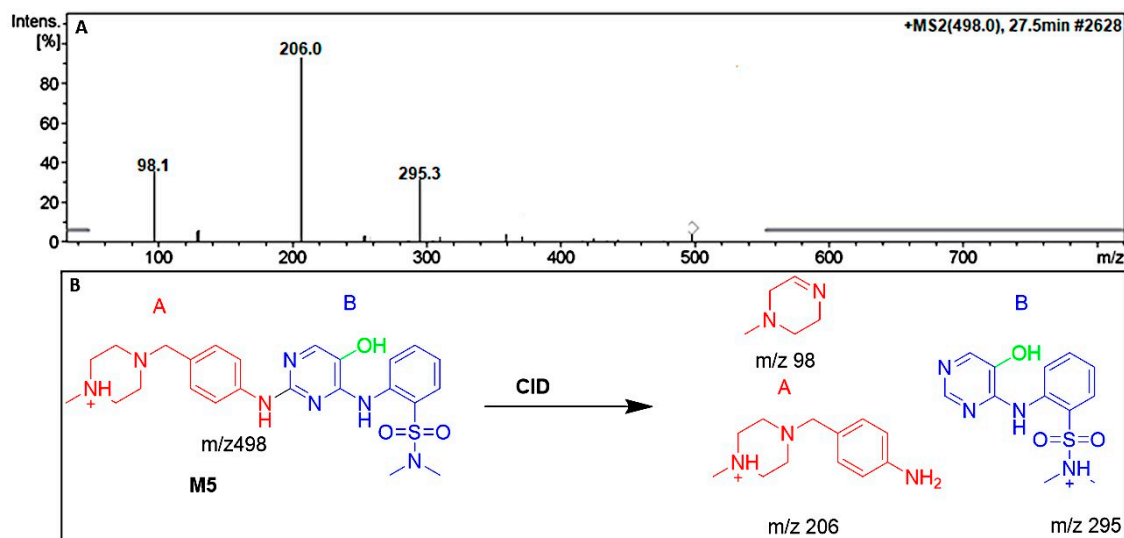


Figure S4. Positive ion MS/MS mass spectrum of M5 at 27.5 min (A). Proposed structural formulas of M5 and corresponding MS/MS fragments (B).

1.1.5. Identification of the DMB M6 metabolite

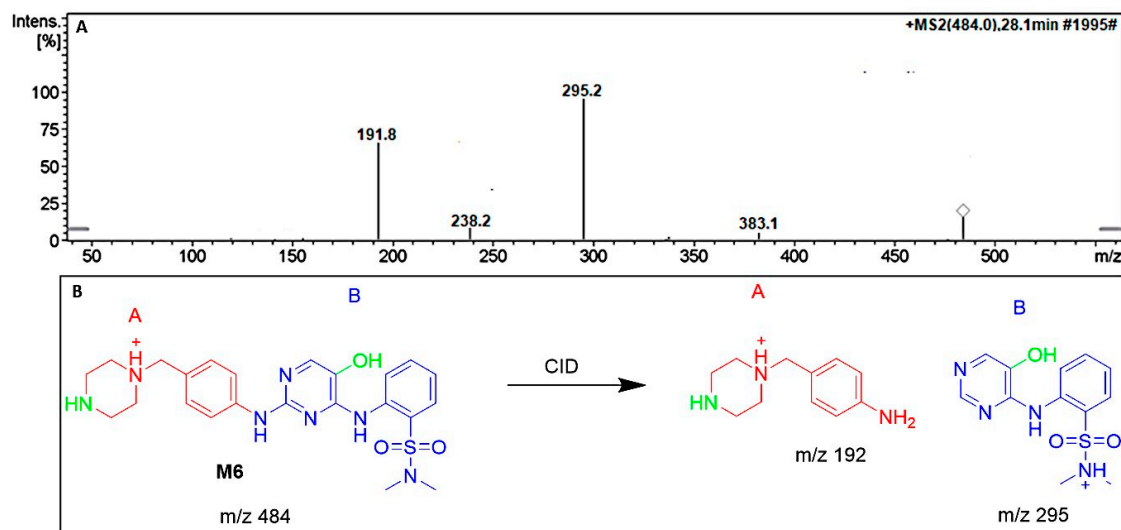


Figure S5. Positive ion MS/MS mass spectrum of M6 at 28.1 min (A). Proposed structural formulas of M6 and corresponding MS/MS fragments (B).

1.1.6. Identification of the M7 DMB metabolite

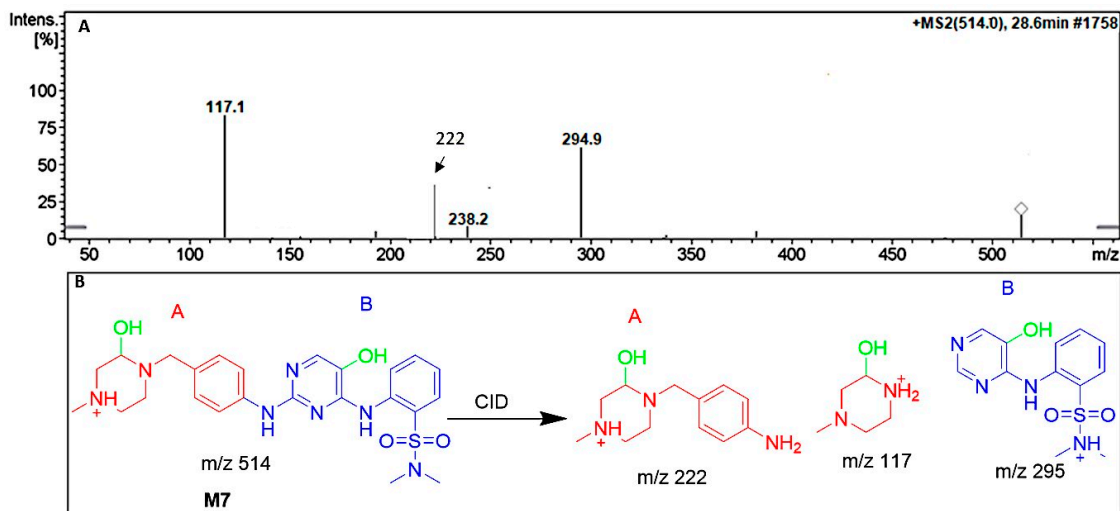


Figure S6. Positive ion MS/MS mass spectrum of M7 at 28.6 min. (A). Proposed structural formulas of M7 and its corresponding MS/MS fragments (B)