Supplementary 1. CYP1A2 gene expression cassette (A), PCR (B), Real Time RT-PCR (C), and Western blot analyses of transgenic A. thaliana plants (D). (A) The binary plant expression vector pTRAK, a derivative of pPAM (gi13508478) containing a constitutive CaM promoter (p3 5S) and the 50 UTR of the Tobacco Leader peptide (TL) was used for the expression of CYP1A2 gene in A. thaliana plants. (B) PCR screening results of selected CYP1A2 transgenic A. thaliana plants after 1% DNA agarose gel electrophoresis. Lane 1: positive control using pTRA-K-TL-CYP1A2 as template, Lane 2, 3, and 4: CYP1A2 PCR products using transgenic A. thaliana plants DNA, Lane 5: WT A. thaliana plants DNA, Lane 6: negative control. (C) Reverse transcriptase RT-PCR analysis of CYP1A2 gene expression in transgenic A. thaliana plants. (D) Western blot analysis showing the presence of human CYP1A2 protein in transgenic lines. PTRAKCYP1A2: the binary plant expression plasmid carrying CYP1A2 gene sequence. WT: wild type, CYP1A2-1, 2, and 3: three independent A. thaliana plants transgenic for the human CYP1A2 gene. Azab et al [35, 37].