**Supplementary Figures**

1- Positive control data

![Figure S1](image1)

**Figure S1**: Extracted ion chromatogram of m/z 499 of control microsomal incubation extract (-NADPH) injected in the LC-QqQ showing masitinib peak.

![Figure S2](image2)

**Figure S2**: Extracted ion chromatogram of m/z 485 of control microsomal incubation extract (-NADPH) injected in the LC-QqQ showing no peaks at m/z 485 at the retention time of the proposed metabolite.

![Figure S3](image3)

**Figure S3**: Extracted ion chromatogram of m/z 529 of control microsomal incubation extract (-NADPH) injected in the LC-QqQ showing no peaks at m/z 529 at the retention time of the proposed metabolite.
Figure S4: Extracted ion chromatogram of m/z 515 of control microsomal incubation extract (-NADPH) injected in the LC-QqQ showing no peaks at m/z 515 at retention times of proposed metabolites.

Figure S5: Extracted ion chromatogram of m/z 531 of control microsomal incubation extract (-NADPH) injected in the LC-QqQ showing no peaks at m/z 531 at retention times of proposed metabolites.
**Figure S6**: Extracted ion chromatogram of m/z 547 of control microsomal incubation extract (-NADPH) injected in the LC-QqQ showing no peaks at m/z 547 at the retention time of the proposed metabolite.

**Figure S7**: Extracted ion chromatogram of m/z 501 of control microsomal incubation extract (-NADPH) injected in the LC-QqQ showing no peaks at m/z 501 at the retention time of the proposed metabolite.

**Figure S8**: Extracted ion chromatogram of m/z 510 of control microsomal incubation extract (-NADPH) injected in the LC-QqQ showing no peaks at m/z 510 at the retention time of the proposed metabolite.
Figure S9: Extracted ion chromatogram of m/z 526 of control microsomal incubation extract (-NADPH) injected in the LC-QqQ showing no peaks at m/z 526 at the retention time of the proposed metabolite.

Figure S10: Extracted ion chromatogram of m/z 538 of control microsomal incubation extract (-NADPH) injected in the LC-QqQ showing no peaks at m/z 538.

Figure S11: Extracted ion chromatogram of m/z 524 of control microsomal incubation extract (-NADPH) injected in the LC-QqQ showing no peaks at m/z 524 in the retention time of the detected metabolites.
2- Negative control data

Figure S12: Extracted ion chromatogram of $m/z$ 499 of negative control microsomal incubation extract (-Masitinib) injected in the LC-QqQ showing no peaks at $m/z$ 499.

Figure S13: Extracted ion chromatogram of $m/z$ 485 of negative control microsomal incubation extract (-Masitinib) injected in the LC-QqQ showing no peaks at $m/z$ 485 at the retention time of the proposed metabolite.
Figure S14: Extracted ion chromatogram of $m/z$ 529 of negative control microsomal incubation extract (-Masitinib) injected in the LC-QqQ showing no peaks at $m/z$ 529 at the retention time of the proposed metabolite.

Figure S15: Extracted ion chromatogram of $m/z$ 515 of negative control microsomal incubation extract (-Masitinib) injected in the LC-QqQ showing no peaks at $m/z$ 515 at the retention time of the proposed metabolite.

Figure S16: Extracted ion chromatogram of $m/z$ 531 of negative control microsomal incubation extract (-Masitinib) injected in the LC-QqQ showing no peaks at $m/z$ 531 at the retention time of the proposed metabolite.
Figure S17: Extracted ion chromatogram of m/z 547 of negative control microsomal incubation extract (-Masitinib) injected in the LC-QqQ showing no peaks at m/z 547 at the retention time of the proposed metabolite.

Figure S18: Extracted ion chromatogram of m/z 501 of negative control microsomal incubation extract (-Masitinib) injected in the LC-QqQ showing no peaks at m/z 501 at the retention time of the proposed metabolite.

Figure S19: Extracted ion chromatogram of m/z 510 of negative control microsomal incubation extract (-Masitinib) injected in the LC-QqQ showing no peaks at m/z 510 at the retention time of the proposed metabolite.
Figure S20: Extracted ion chromatogram of m/z 526 of negative control microsomal incubation extract (-Masitinib) injected in the LC-QqQ showing no peaks at m/z 526 at the retention time of the proposed metabolite.

Figure S21: Extracted ion chromatogram of m/z 538 of negative control microsomal incubation extract (-Masitinib) injected in the LC-QqQ showing no peaks at m/z 538 at the retention time of the proposed metabolite.

Figure S22: Extracted ion chromatogram of m/z 524 of negative control microsomal incubation extract (-Masitinib) injected in the LC-QqQ showing no peaks at m/z 524 at the retention time of the proposed metabolite.