Electronic Supplementary Information For:

Distribution of Selenium in Zebrafish Larvae after Exposure to Organic and Inorganic Selenium Forms

N. V. Dolgova,[a] M. J. Hackett,[a] T. C. MacDonald,[abc] S. Nehzati,[a] A. K. James,[abc] P. H. Krone,[cb] G. N. George[abd] and I. J. Pickering[abd]

[a.] *Molecular and Environmental Science Research Group, Department of Geological Sciences, University of Saskatchewan, Saskatoon, SK, S7N 5E2, Canada. E-mail: ingrid.pickering@ @usask.ca.*
[b.] *Toxicology Centre, University of Saskatchewan, Saskatoon, SK, S7N 5B3, Canada*
[c.] *Department of Anatomy and Cell Biology, University of Saskatchewan, Saskatoon, SK, S7N 5E5, Canada.*
[d.] *Department of Chemistry, University of Saskatchewan, Saskatoon, SK, S7N 5C9, Canada.*

—— 4 Pages – Figures S1 to S5 ——

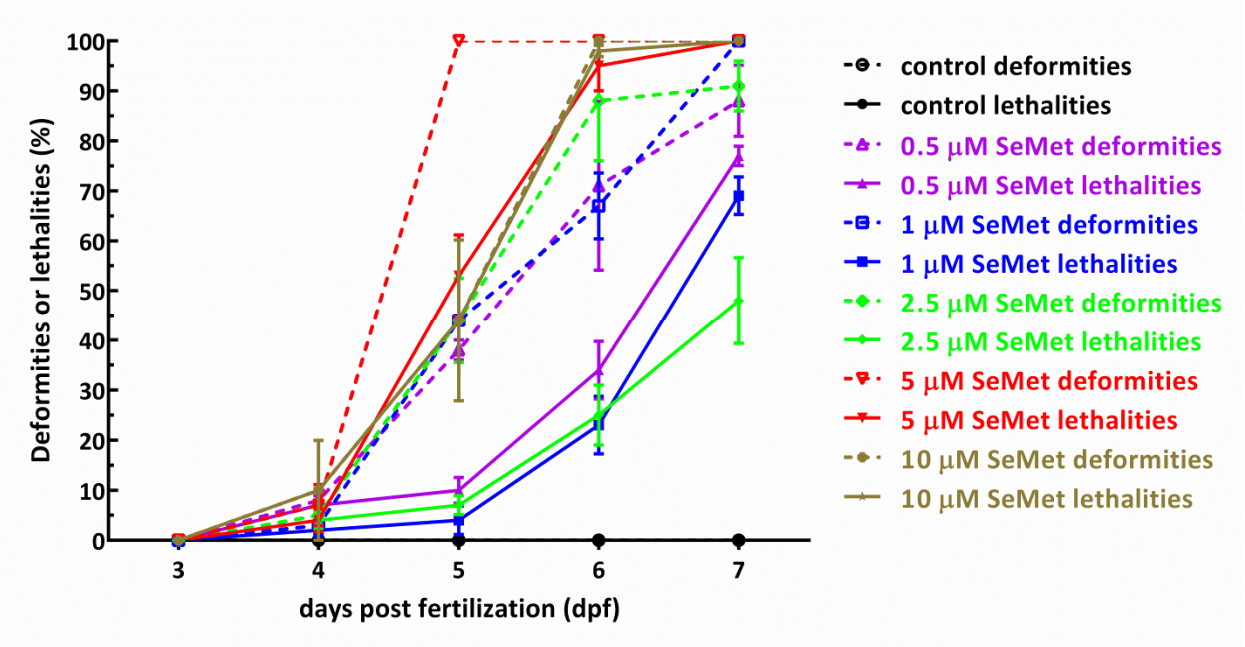

Figure S1. Deformities (solid lines) and lethalities (dashed lines) of zebrafish larvae in the presence of different concentrations of L-selenomethionine in the embryo culture media.

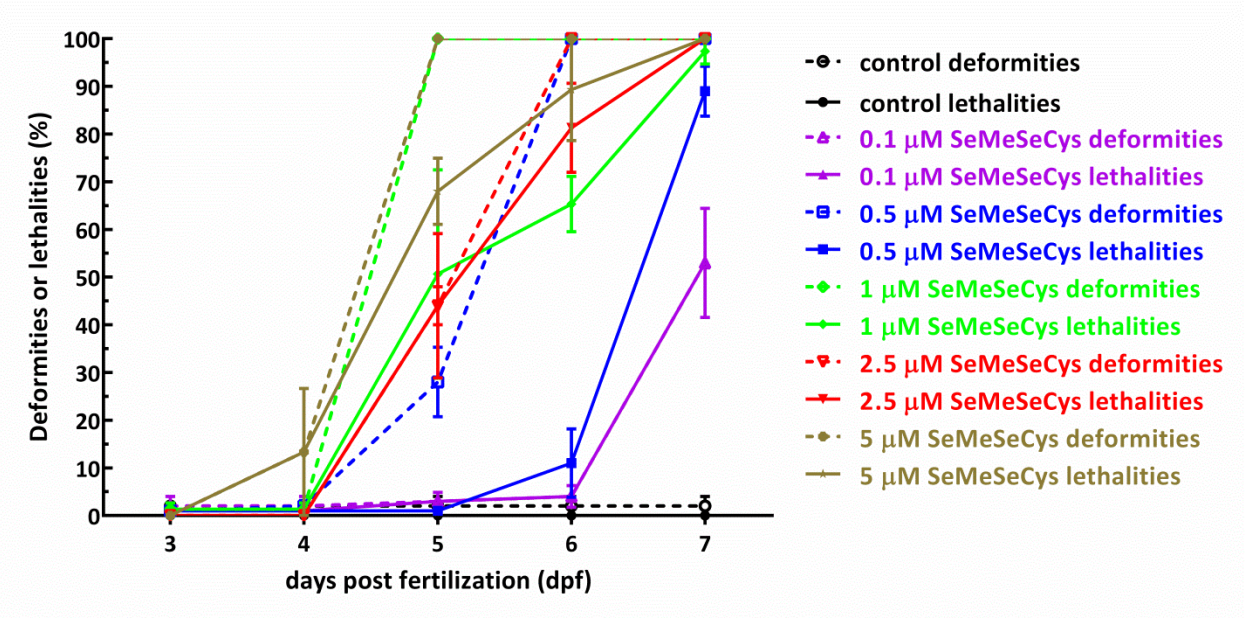

Figure S2. Deformities (solid lines) and lethalities (dashed lines) of zebrafish larvae in the presence of different concentrations of Se-methyl-L-selenocysteine in the embryo culture media.

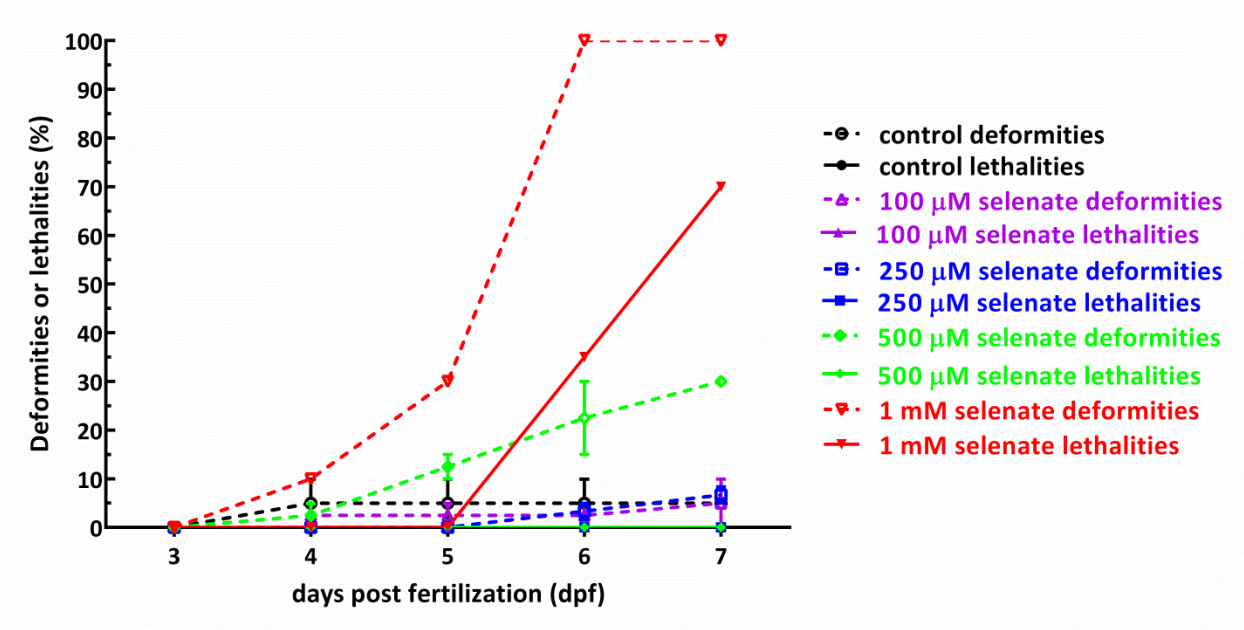

Figure S3. Deformities (solid lines) and lethalities (dashed lines) of zebrafish larvae in the presence of different concentrations of selenate in the embryo culture media.

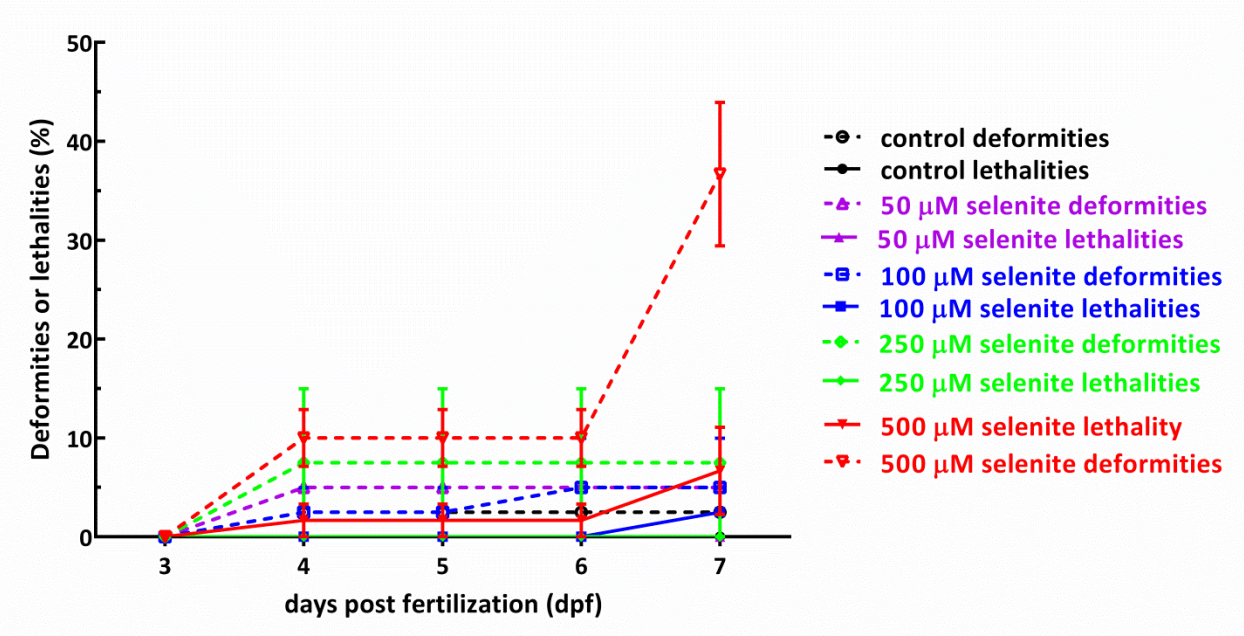

Figure S4. Deformities (solid lines) and lethalities (dashed lines) of zebrafish larvae in the presence of different concentrations of selenite in the embryo culture media.

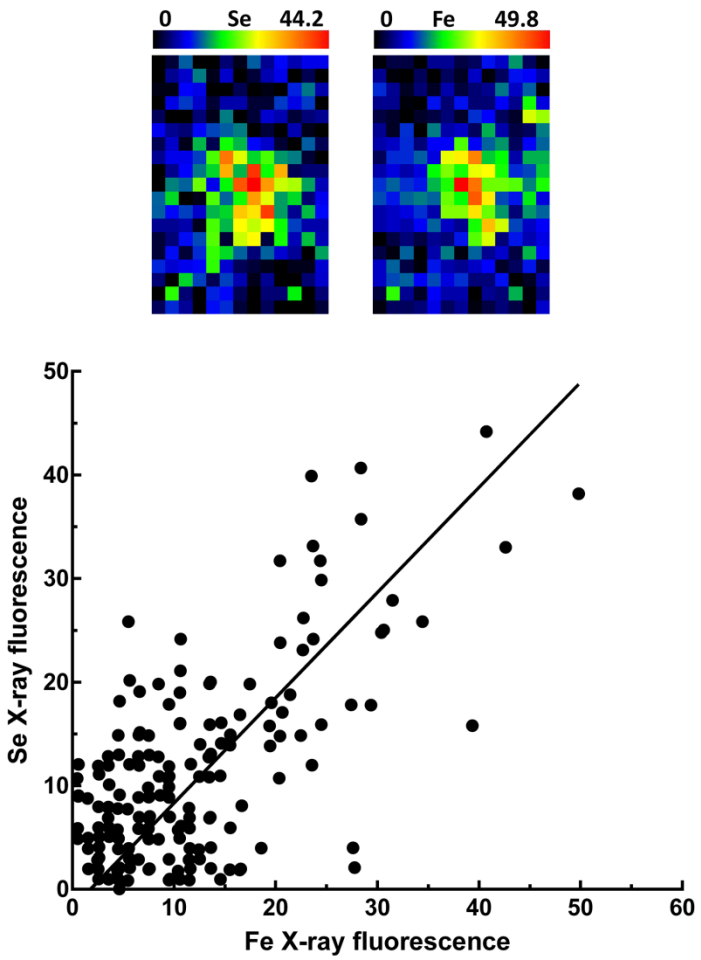

Figure S5. XFI of the heart region of a selenomethionine-treated zebrafish larva showing iron and selenium (upper panels). Pixels are 5 µm × 5 µm. The intensity scales show background-subtracted X-ray fluorescence counts, normalized to incident intensity (arbitrary units). The correlation plot (lower panel) shows selenium versus iron X-ray fluorescence counts (both following background subtraction and normalization to incident intensity). The correlation between selenium and iron is significant with R^2=0.44 (after rejecting the lower 10%, R^2=0.50).