# Supplementary Material

Cadmium and chromium determination in herbal tinctures employing direct analysis by graphite furnace atomic absorption spectrometry (GF AAS)

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**Table S1**. Instrumental parameters recommended by the manufacturer for the determination of cadmium and chromium by GF AAS

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| --- | --- | --- |
| **Parameters** | **Cadmium** | **Chromium** |
| Pyrolysis Temperature (°C) | 300ª, 600b | 1200 |
| Atomization Temperature (°C) | 900ª, 1000b | 2500 |
| Chemical modifier | Pd or Mg(NO3)2  | Mg(NO3)2 |

a without the chemical modifier b with the chemical modifier

**Table S2.** Analysisof linear regression of the external calibration model for the determination of cadmium and chromium by direct analysis by GF AAS

|  |  |  |
| --- | --- | --- |
| **Statistical test** | **Cadmium** | **Chromium** |
| Shapiro-Wilk Test (Wtab = 0.859) | Wcalc = 1.024 | Wcalc = 0.965 |
| Cochran Test (Ctab = 0.7808) | Ccalc = 0.6504 | Ccalc = 0.4874 |
| Lack of adjust (Ffaj-tab = 4.53) | Ffaj-calc = 3.21 | Ffaj-calc = 0.51 |
| Regression (Freg-tab = 1.04) | Freg-calc = 1347 | Freg-calc = 497 |
| R² | 0.9940 | 0.9909 |





Figure S1. Pyrolysis and atomization temperature curves for Cd. Acidic standard and digested sample. Fixed values to the optimization, atomization temperature: 900°C and pyrolysis temperature: 500°C.





Figure S2. Pyrolysis and atomization temperature curves for Cr. Acidic standard and digested sample. Fixed values to the optimization, atomization temperature: 2500°C and pyrolysis temperature: 1500 °C.