**Supporting materials**

**Anticancer and Microbicide Action of Carbon Quantum Dots Derived from Microcrystalline Cellulose: Hydrothermal versus Infrared Assisted Techniques**

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|  **[a]** |  |
| **[b]** |  |
| **[c]** |  |
| **[d]** |  |

**Figure S1:** Spectral analysis for the prepared CQDs; **[a, b]** 1H-NMR, **[c, d]** 13C-NMR, **[a, c]** CQDs-HT and **[b, d]** CQDs-IR.

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 **Figure S2:** FTIR spectra for MCC and the prepared CQDs.

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| **[a]** |  |
| **[b]** |  |
| **[c]** |  |
| **[d]** |  |
| **[e]** |  |

**Figure S3:** Anticancer activity for the prepared CQDs against Hepatocellular Carcinoma (HepG2); **[a, b]** formula, **[c, d]** CQDs, **[a, c]** optical density, **[b, d]** the percentage of cell mortality and **[e]** IC50.