**Supplement table: A: Sequences of the primers used in assay of urinary metabolomics (based on gene expression *CRAT and SLC25A20)* B: Comparison of mRNA expression between control and bladder cancer patients**

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| A: |  | |
| Gene | **Primer** | |
| *CRAT* | S: 5’-CAGGCCAGATGCTGCATG-3’  AS: 5’-TAGTCCAGAAGGGTGACAATAGGG-3’ | |
| *SLC25A20* | S: 5’-ACCGAGTTTGCCTGGACA-3’  AS: 5’-ACCAAACCCAAAGAAGCACAC-3’ | |
| *GABDH* | S: 5’-GAAGGTGAAGGTCGTAGTC  AS: 5’-GAAGATGGTGATGGGATTTC | |
| B: Comparison of mRNA expression between control and bladder cancer patients | |  |
|  | **Control BC patients**  **mRNA expression, mRNA expression p**  **×10**8**copies/μg, ×10**8**copies/μg, value**  **median (range) median (range)** | |
| *CRAT*  *SLC25A20* | 1.04 (0.03) 0.35 (0.05) <0.001  1.06 (0.04) 0.39 (0.05) <0.001 | |

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| *CRAT*, carnitine O-acetyltransferase; *SLC25A20*, solute carrier family 25 [carnitine/acylcarnitine  translocase (CACT)]; *GAPDH*, Glyceraldehyde-3-phosphate dehydrogenase |