

# Supplementary Material: N-3 Long-Chain Polyunsaturated Fatty Acids, Eicosapentaenoic and Docosahexaenoic Acid, and the Role of Supplementation during Cancer Treatment: A Scoping Review of Current Clinical Evidence

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**Table S1.** Characteristics of the C reactive protein assessments included in clinical trials.

| Cancer localization            | Baseline values (mg/ml)  | End of Treatment   | Direction of change in N-3 group   | Reference |
|--------------------------------|--|--|--|-----------|
|                                |  | Pre or Post treatment  |  |           |
| Breast (Pre-chemotherapy)      | CNT: 1 (0-2)<br>N-3: 1 (1-5)   | CNT: $\Delta$ 17.2% (-0.16 to 91.99)<br>N-3: $\Delta$ -5.9% (-35.4 to 74.12)   | Stable CRP compared to baseline; NS $\downarrow$ compared to CNT ( $P < 0.06$ )  | [12]      |
| Breast (Post-treatment, on AI) | N-3 (high CRP): 13.3 ( $\pm 3.6$ )<br>N-3 (med CRP): 7.6 ( $\pm 1.4$ )<br>N-3 (low CRP): 4.8 ( $\pm 0.5$ ) | N-3 (high CRP): $\Delta$ -12 ( $\pm 16.4$ )<br>N-3 (med CRP): $\Delta$ -2.2 ( $\pm 3.0$ )<br>N-3 (low CRP): $\Delta$ 0.2 ( $\pm 2.9$ ) | N-3 group with highest baseline CRP had largest $\downarrow$ ( $P < 0.02$ ), med baseline CRP had second $\downarrow$ ( $P < 0.04$ ), lowest baseline CRP: NC. | [13]      |
|                                |  | Stages III, IV (concurrent with chemotherapy) or Palliative  |  |           |
| Colorectal                     | 149 (12 to 447)  | CNT: $\Delta$ -5.0 (-182 to 109)<br>N-3: $\Delta$ 3.0 (-152 to 109)  | NC   | [40]      |

|              |  |   |   |      |
|--------------|--|---|---|------|
| Colorectal   | 18.2 ( $\pm$ 13.9)                                   | N-3: 19.4 ( $\pm$ 17.7)   | No placebo; CRP levels at end of Wk 3 were $\uparrow$ and returned to baseline levels at Wk 9                         | [41] |
| Colorectal   | CNT: 4.85 (1.01-6.33)<br>N-3: 3.39 (1.49-18.24)      | CNT: $\Delta$ 24 ( $\pm$ 30.2)<br>N-3: $\Delta$ -8.8 ( $\pm$ 13.5)        | $\downarrow$ Compared to baseline ( $P$ <0.05) and CNT ( $P$ <0.04)   | [32] |
| Colorectal   | CNT: 6.4 (1.6-23.7)<br>N-3: 5.1 (4.1-12.3)           | CNT: $\Delta$ 1 (-1.8 to 10.3)<br>N-3: $\Delta$ -1.4 (-4 to -0.7)         | $\downarrow$ Compared to baseline and CNT ( $P$ <0.06)  | [33] |
| Head & Neck  | CNT: 25 ( $\pm$ 38)<br>N-3: 21 ( $\pm$ 35)           | CNT: $\Delta$ -13 ( $\pm$ 36)<br>N-3: $\Delta$ -7 ( $\pm$ 34)             | NS  | [18] |
| Leukemia     | CNT: 16.9 (6.8-75.9)<br>N-3: 35.3 (10.2 -54.4)       | CNT: $\Delta$ -13.7 (-47.4 to -1.1)<br>N-3: $\Delta$ -4.7 (-23.8 to -1.0) | $\downarrow$ Compared to baseline ( $P$ <0.04)  | [48] |
| Lung         | 580 (67-1134)  | CNT: $\Delta$ -22 (-871 to 103)<br>N-3: $\Delta$ -45 (-1066 to 302)       | NS trend towards $\downarrow$ CRP   | [40] |
| Lung         | N-3: 33 ( $\pm$ 17.8)<br>N-3+chemo: 38 ( $\pm$ 22.3) | N-3: $\Delta$ -6.7 (4.5)<br>N-3+chemo: -21.3 (7)                          | Both groups $\downarrow$ CRP to baseline ( $P$ <0.02); N-3+chemo $\downarrow$ CRP compared to N-3 alone ( $P$ <0.005) | [52] |
| Lung (NSCLC) | CNT: 50.4 ( $\pm$ 66.8)<br>N-3: 39.1 ( $\pm$ 42.9)   | Not defined, but both groups decreased until study end                    | No difference, between groups, but malnourished had $\uparrow$ CRP compared to nourished                              | [53] |
| Lung (NSCLC) | CNT: 37 ( $\pm$ 40)<br>N-3: 32 ( $\pm$ 40)           | CNT: $\Delta$ 1.9 ( $\pm$ 0.2)<br>N-3: $\Delta$ -13                       | $\downarrow$ Compared to baseline ( $P$ <0.02) and CNT ( $P$ <0.07)   | [54] |
| Lung (NSCLC) | CNT: 11.5<br>N-3: 12.89                              | CNT: 27.09<br>N-3: 10.09  | Stable CRP compared to control  | [50] |

|                        |  |   |  |
|------------------------|--|---|--|
| Lung (NSCLC)           | CNT: 12.7 ( $\pm$ 3.5)<br>N-3: 13.5 ( $\pm$ 3.9) | CNT: $\Delta$ 9.4 (6.8 to 11.3) $\downarrow$ Compared to baseline<br>N-3: $\Delta$ -2.2 (-5.7 to -0.8) and CNT ( $P$ <0.01) | [51]   |
| Pancreatic             | CNT: 11 (5-30)<br>N-3: <5 (<5-21)                | CNT: $\Delta$ ~30% $\uparrow$<br>N-3: NC  | Stable CRP compared to control<br>[59]   |
| Surgical interventions |  |   |  |
| Esophageal (O-III)     | CNT: 6 (5)*<br>N-3: 6 (5)                        | CNT: Surgery: 137 (45) to 54 (50) post<br>N-3: Surgery: 148 (36) to 30 (23) post  | $\uparrow$ after surgery & $\downarrow$ by day 21 but not different from CNT<br>[46] |
| Gastrointestinal       | CNT: 0.3 ( $\pm$ 0.1)<br>N-3: 0.4 ( $\pm$ 0.1)   | CNT: Surgery: 4.6 ( $\pm$ 1.8) to 3.9 ( $\pm$ 2.3) post<br>N-3: Surgery: 4.8 ( $\pm$ 2.3) to 2.0 ( $\pm$ 1.1) post          | $\uparrow$ after surgery & $\downarrow$ compared CNT by day 8 ( $P$ <0.05)<br>[24]   |

\*Reported mg/l in this study