**Supplementary data 3. Association between institutional information about specialized cancer care and the frequency of “Reason for Referral” and “Problem Identified” by the first author during symptom assessment**

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| **Symptom assessment** | **Institutional information about specialized cancer care\*1** | **p\*2** |
| No | Yes |
| N (%) |
| Decrease in food intake | Reason for referral | 11 (91.7) | 27 (75.0) | 0.414 |
| Problem identified | 1 (8.33) | 9 (25.0) |
| Nausea | Reason for referral | 2 (66.7) | 21 (72.4) | 1.00 |
| Problem identified | 1 (33.3) | 8 (27.6) |
| Abdominal distension | Reason for referral | 6 (75.0) | 14 (66.7) | 1.00 |
| Problem identified | 2 (25.0) | 7 (33.3) |
| Constipation | Reason for referral | 0 (0.00) | 2 (8.70) | 1.00 |
| Problem identified | 5 (100) | 21 (91.3) |
| Edema | Reason for referral | 4 (80.0) | 4 (66.7) | 1.00 |
| Problem identified | 1 (20.0) | 2 (33.3) |
| Sleep disturbance | Reason for referral | 5 (26.3) | 10 (17.2) | 0.505 |
| Problem identified | 14 (73.7) | 48 (82.8) |
| Drowsiness | Reason for referral | 3 (100) | 9 (52.9) | 0.242 |
| Problem identified | 0 (0.00) | 8 (47.1) |
| Spiritual issues | Reason for referral | 1 (6.67) | 5 (17.2) | 0.647 |
| Problem identified | 14 (93.3) | 24 (82.8) |
| Fatigue | Reason for referral | 10 (76.9) | 27 (73.0) | 1.00 |
| Problem identified | 3 (23.1) | 10 (27.0) |
| Delirium | Reason for referral | 5 (45.5) | 19 (47.5) | 1.00 |
| Problem identified | 6 (54.5) | 21 (52.5) |
| Pain | Reason for referral | 22 (91.7) | 117 (93.6) | 0.664 |
| Problem identified | 2 (8.33) | 8 (6.4) |
| Dyspnea | Reason for referral | 12 (75.0) | 26 (59.1) | 0.367 |
| Problem identified | 4 (25.0) | 18 (40.9) |
| Anxiety | Reason for referral | 13 (41.9) | 23 (29.1) | 0.259 |
| Problem identified | 18 (58.1) | 56 (70.9) |
| Inadequate informed consent | Reason for referral | 12 (60.0) | 23 (38.3) | 0.120 |
| Problem identified | 8 (40.0) | 37 (61.7) |

\*1 Institution is not specialized in cancer care: Sugita Genpaku Memorial Obama Municipal Hospital. Institutions that are specialized in cancer care: University of Fukui Hospital and Fukui Prefectural Hospital.

\*2 Fisher’s exact test.