2. Les anti-émétiques

Ces dernières années, l'évolution a été marquée par le developpement du NEPA (association en 1 seul comprimé oral de nétupitant et palonosetron) et l'importance croissante de l'olanzapine.

- **Les antagonistes des récepteurs à la sérotonine de type 3 (anti-5-HT3) ou sétrons :**
  Trois substances actives sont commercialisées en France :
  - Deux de première génération : Ondansétron et Granisétron.
  - Le palonosétron : molécule de seconde génération, recommandée comme alternative préférentielle aux sétrons de 1ère génération pour les chimiothérapies moyennement et hautement émétisantes (par voie intraveineuse, 30 minutes avant le début de la chimiothérapie émétisante et à la dose de 250 µg). Une alternative orale (0.5mg) semble équivalente (12).
  Une forme de granisetron longue-durée par voie sous cutanée a montré son équivalence par rapport au palonosetron IV (13). En revanche, une méta-analyse étudiant le granisetron sous la forme sous-cutanée versus sa voie orale démontre une supériorité de la prise orale dans le contrôle des NVCI (14).
  Effets secondaires les plus fréquents : céphalées, constipation et élévation transitoire des transaminases. Les sétrons sont déconseillés en association avec certains Inhibiteurs des Tyrosines Kinases en raison d'un risque d'allongement du QT (Voir tableau 6).

- **Les corticoïdes :**
  Bien que leur efficacité soit démontrée depuis longtemps, leur mode d'action reste mal connu. La molécule la plus étudiée, dans la littérature, est la dexaméthasone. Toutefois, aucune preuve ne pourrait laisser penser que l'efficacité soit différente selon le type d'agent utilisé.
  Une méta-analyse sur données individuelles (5 études, 1194 patients) a retrouvé une non-infériorité de la prise unique au jour 1 de dexaméthasone associée au palonosetron par rapport à la prise prolongée sur 3 jours des 2 molécules (15). De plus, il n'y a pas de preuve clinique justifiant le retrait de la corticothérapie lorsqu'une molécule d'immunothérapie est utilisée en combinaison à la chimiothérapie (16).
  Le tableau 3 reprend, pour mémoire, les équivalences de doses des corticoïdes (17).

Molécule	Activité anti-inflammatoire	Eq. Dose
Hydrocortisone	1	20 mg
Prednisone Prednisolone	4	5 mg
Méthylprednisolone	5	4 mg
Dexa et béta-méthasone	25-30	0,75 mg

Tableau 4 – Equivalences d'effet et de dose des différents glucocorticoïdes

- **Les antagonistes des récepteurs aux neurokinines de type 1 (Anti NK1) :**
  L'aprépitant (Emend®) par voie orale est la seule molécule de cette classe disponible en France. Associé aux autres anti-émétiques, il améliore significativement le contrôle des NVCI en phase aiguë et retardée notamment pour les chimiothérapies hautement émétisante (18).
  Effets secondaires les plus fréquents : troubles digestifs (constipation, diarrhée, dyspepsie, éructations), asthénie, anorexie et hoquet.
  L'aprépitant est un inhibiteur du cytochrome P450 3A4. Cet agent est à ce titre pourvoyeur de plusieurs interactions médicamenteuses. Parmi celles-ci on retiendra notamment (19) :

- Les interactions avec les **corticoïdes** :
  - La dose orale habituelle de dexaméthasone doit être réduite d'environ 50% en cas de co-administration avec l'aprépitant selon le schéma posologique de 125 mg/80 mg.
  - La dose habituelle de méthylprednisolone administrée par voie intraveineuse doit être réduite d'environ 25 %, et la dose orale habituelle de méthylprednisolone d'environ 50 % en cas de co-administration avec l'aprépitant selon le schéma posologique de 125 mg/80 mg.
- Les interactions avec la **warfarine**: risque de diminution de l'INR.
- Les interactions avec les **contraceptifs à base d'éthinyloestradiol et de noréthindrone** : diminution de leur efficacité.

- **Formes combinées (Anti-NK1 + 5HT3)**

  Le NEPA (association fixe orale de nétupitant 300 mg et palonosetron 0.5 mg), s'administre 1 heure avant la chimiothérapie par cisplatine au J1 uniquement. L'efficacité de cette molécule combinée à la dexaméthasone est non-inférieure au triplet habituel (aprépitant + granisetron + dexaméthasone) (20,21). L'association est commercialisée en France sous le nom d'AKYNZEO® et remboursée dans l'indication suivante : « traitement de 1ère intention en prévention des nausées et vomissements aigus et retardés associés aux chimiothérapies anticancéreuses hautement émétisantes à base de cisplatine ». Un avis défavorable à son remboursement pour les prescriptions dans les chimiothérapies moyennement émétisantes a été émis en décembre 2020 par la commission de transparence de l'HAS (SMR insuffisant). Ce médicament est néanmoins proposé par l'ASCO dans ses dernières recommandations de 2017 et par la MASCC/ESMO en 2016, en prévention des NVCI pour les chimiothérapies moyennement émétisantes contenant du carboplatine.

  Par ailleurs, une étude coût-efficacité comparant l'aprépitant + granisétron versus le NEPA est en faveur du NEPA (22).

- **Les antagonistes des récepteurs à la dopamine 2 (Anti D2) :**

  Il s'agit de la classe médicamenteuse la plus anciennement utilisée mais également celle avec l'index thérapeutique le plus faible.

  Les molécules disponibles sont le métoclopramide, la metopimazine et l'alizapride.

  La domperidone a été inscrite sur la liste des médicaments sous surveillance renforcée de l'ANSM en 2014 en raison de l'observation d'effets indésirables graves cardiaques (dont allongement de l'intervalle QT et mort subite)[D]. L'AFSOS recommande de ne pas utiliser la Dompéridone.

  De même, l'EMA (*European Medicine Agency*) a émis une recommandation à propos du métoclopramide en raison de ses effets neurologiques[E]. Chez l'adulte, l'EMA recommande de ne pas dépasser la dose de 30 mg/j (3x10 mg) per os pendant 5j. Toutefois, les auteurs des recommandations MASCC/ESMO suggèrent, malgré cela, une utilisation possible jusque à des doses plus élevées pendant 2 à 3 jours.

- **L'olanzapine (Zyprexa®)**

  C'est un antipsychotique qui dispose d'un effet inhibiteur sur plusieurs récepteurs de neurotransmetteurs. Elle peut être utilisée dans la prévention et le traitement des NVCI aiguës et retardées. Après 4 études de phases III publiées de puissance insuffisante (23), unenouvelle étude de phase III (contre placebo) parue en 2016 montre, en association avec un traitement anti-nauséeux conventionnel, une réduction significative de

[D] Site de l'ANSM. De nouvelles recommandations pour minimiser les risques cardiaques des médicaments contenant de la domperidone - Point d'Information. 01/09/2014. http://ansm.sante.fr/S-informer/Points-d-information-Points-d-information/De-nouvelles-recommandations-pour-minimiser-les-risques-cardiaques-des-medicaments-contenant-de-la-domperidone-Point-d-Information

[E] http://www.ema.europa.eu/ema/index.jsp?curl=pages/medicines/human/referrals/Metoclopramide-containing_medicines/human_referral_000349.jsp&mid=WC0b01ac05805c516f

la fréquence des NVCI chez des patients recevant des chimiothérapies hautement émétisantes tant en phase aigue (74% vs. 45%, P=0.002) que retardée (<3j : 42% vs. 25%, P=0.002) (24). La posologie de 5 mg/jour a une efficacité similaire à celle utilisée intialement (10 mg par jour) avec moins de somnolence (18,19). Le surcoût est par ailleurs modeste. Une revue systématique et méta-analyse publiée en 2019 (ESMO Open) regroupant 11 études randominées soit 1107 patients recevant une chimiothérapie hautement à moyennement émétisante (dont 561 dans le groupe olanzapine), démontre que l'ajout de l'olanzapine à 5 ou 10 mg versus sétron plus dexamethasone seuls diminue les NVCI notamment les grades III et IV ; la posologie de 5 mg est moins pourvoyeuse de somnolence et l'efficacité des 2 posologies sur la diminution des NVCI aigus et retardés est comparable (25). Dans les dernières recommandations de l'ASCO, l'olanzapine est associée systématiquement de J1à J4 dans la prévention des NVCI en cas de chimiothérapie hautement émétisante (26). Dans les recommandations MASCC/ESMO, qui n'ont pas été actualisées depuis 2016, ainsi que dans celles de l'AFSOS actualisées en 2017[F], l'olanzapine reste une option (27).

- **Les autres anti-émétiques :**
  -Le niveau d'efficacité des cannabinoïdes (marijuana à usage médical) ne permet pas de les recommander dans le traitement préventif des nausées/vomissements. Leur intérêt est néanmoins croissant (10,28). On rappelle qu'ils ne sont pas autorisés en France dans cette indication.
  -Le Lorazepam est un adjuvant utile mais ne doit pas être utilisé seul.

- **Régles hygiéno-diététiques (cf. référentiel AFSOS[G]) :**
  -Favoriser l'hydratation
  -Fractionner l'alimentation : 6 à 8 petits repas/collations /jour
  -Privilégier des petits repas froids, éviter les aliments gras/frits/épicés
  -Manger lentement
  -Boissons selon les goûts du patient entre les repas (eau, infusion, jus de pomme, coca), si besoin avec une tasse fermée et une paille (limitation des odeurs)
  -Maintenir une position assise 30 minutes après les repas (à défaut, en décubitus latéral droit)

- **Médecines complémentaires :**
  Il n'y a pas d'évidence en faveur ou défaveur des traitements dits complémentaires.
  L'acupuncture, en complément d'une prophylaxie médicamenteuse bien conduite, pourrait être efficace sur les nausées aigues sur la base de quelques essais randomisés de petites tailles (29). D'autres essais de plus grande ampleur sont en cours (30–32).

3. Prévention et prise en charge des NVCI

La prévention et le traitement des NVCI sont repris dans les tableaux 5 (chimiothérapies cytotoxiques & immunothérapie) et 6 (thérapies ciblées orales), adaptés des recommandations 2016 du du MASCC/ESMO (27,33) et 2017 de l'ASCO (26,34,35).
Les différents types de chimiothérapies utilisées dans le traitement des CBNPC sont classés en quatre catégories en fonction de leur risque émétogène : hautement, moyennement, faiblement et minimal (36). Pour chacun de ces risques, un protocole de prévention et de traitement précis est recommandé. Dans les protocoles utilisant plusieurs drogues, il est nécessaire de tenir compte du niveau de la drogue la plus émétisante.
Il faut aussi adapter d'emblée le protocole en fonction des facteurs de risque éventuels du patient ; c'est la notion de « **prophylaxie surclassée** » si besoin dès la 1ère cure.

[F] AFSOS, Prise En Charge Des Nausées-Vomissements Chimio-Induits, MAJ 15/12/2017, disponible sur http://www.afsos.org/fiche-referentiel/nausees-vomissements-chimio-induits, accédé le 08/11/2019

REFERENCES

1. Temel JS, Greer JA, Muzikansky A, Gallagher ER, Admane S, Jackson VA, et al. Early palliative care for patients with metastatic non-small-cell lung cancer. N Engl J Med. 2010 Aug 19;363(8):733–42.
2. Di Maio M, Basch E, Bryce J, Perrone F. Patient-reported outcomes in the evaluation of toxicity of anticancer treatments. Nat Rev Clin Oncol. 2016 May;13(5):319–25.
3. Basch E, Dueck AC, Rogak LJ, Mitchell SA, Minasian LM, Denicoff AM, et al. Feasibility of Implementing the Patient-Reported Outcomes Version of the Common Terminology Criteria for Adverse Events in a Multicenter Trial: NCCTG N1048. JCO. 2018 Nov;36(31):3120–5.
4. Lorusso D, Bria E, Costantini A, Di Maio M, Rosti G, Mancuso A. Patients' perception of chemotherapy side effects: Expectations, doctor-patient communication and impact on quality of life - An Italian survey. Eur J Cancer Care (Engl). 2017 Mar;26(2).
5. Matzka M, Köck-Hódi S, Jahn P, Mayer H. Relationship among symptom clusters, quality of life, and treatment-specific optimism in patients with cancer. Support Care Cancer. 2018 Aug;26(8):2685–93.
6. Vidall C, Fernández-Ortega P, Cortinovis D, Jahn P, Amlani B, Scotté F. Impact and management of chemotherapy/radiotherapy-induced nausea and vomiting and the perceptual gap between oncologists/oncology nurses and patients: a cross-sectional multinational survey. Support Care Cancer. 2015 Nov;23(11):3297–305.
7. Durand JP, Madelaine I, Scotté F. [Guidelines for prophylaxis and treatment of chemotherapy-induced nausea and vomiting]. Bull Cancer. 2009 Oct;96(10):951–60.
8. Feyer P, Jordan K. Update and new trends in antiemetic therapy: the continuing need for novel therapies. Ann Oncol. 2011 Jan;22(1):30–8.
9. Dranitsaris G, Molassiotis A, Clemons M, Roeland E, Schwartzberg L, Dielenseger P, et al. The development of a prediction tool to identify cancer patients at high risk for chemotherapy-induced nausea and vomiting. Ann Oncol. 2017 Jun 1;28(6):1260–7.
10. Ahrari S, Chow R, Goodall S, DeAngelis C. Anticipatory nausea: current landscape and future directions. Ann Palliat Med. 2017 Jan;6(1):1–2.
11. Puri S, Hyland KA, Weiss KC, Bell GC, Gray JE, Kim R, et al. Prediction of chemotherapy-induced nausea and vomiting from patient-reported and genetic risk factors. Support Care Cancer. 2018 Aug;26(8):2911–8.
12. Karthaus M, Tibor C, Lorusso V, Singh-Arora R, Filippov A, Rizzi G, et al. Efficacy and safety of oral palonosetron compared with IV palonosetron administered with dexamethasone for the prevention of chemotherapy-induced nausea and vomiting (CINV) in patients with solid tumors receiving cisplatin-based highly emetogenic chemotherapy (HEC). Support Care Cancer. 2015 Oct;23(10):2917–23.
13. Raftopoulos H, Cooper W, O'Boyle E, Gabrail N, Boccia R, Gralla RJ. Comparison of an extended-release formulation of granisetron (APF530) versus palonosetron for the prevention of chemotherapy-induced nausea and vomiting associated with moderately or highly emetogenic chemotherapy: results of a prospective, randomized, double-blind, noninferiority phase 3 trial. Support Care Cancer. 2015 Mar;23(3):723–32.
14. Chua AV, Hernandez ARB, Real IO. Transdermal versus oral granisetron in controlling chemotherapy-induced nausea and vomiting: a meta-analysis. Support Care Cancer. 2020 Dec;28(12):5611–9.
15. Okada Y, Oba K, Furukawa N, Kosaka Y, Okita K, Yuki S, et al. One-Day Versus Three-Day Dexamethasone in Combination with Palonosetron for the Prevention of Chemotherapy-Induced Nausea and Vomiting: A Systematic Review and Individual Patient Data-Based Meta-Analysis. Oncologist. 2019 Dec;24(12):1593–600.
16. Hesketh PJ, Kris MG, Basch E, Bohlke K, Barbour SY, Clark-Snow RA, et al. Antiemetics: ASCO Guideline Update. J Clin Oncol. 2020 Aug 20;38(24):2782–97.
17. VITAL-DURAND D. Guide pratique des médicaments Dorosz. 28th ed. 2009.
18. Saito H, Yoshizawa H, Yoshimori K, Katakami N, Katsumata N, Kawahara M, et al. Efficacy and safety of single-dose fosaprepitant in the prevention of chemotherapy-induced nausea and vomiting in patients receiving high-dose cisplatin: a multicentre, randomised, double-blind, placebo-controlled phase 3 trial. Ann Oncol. 2013 Apr;24(4):1067–73.
19. Aapro MS, Walko CM. Aprepitant: drug-drug interactions in perspective. Ann Oncol. 2010 Dec;21(12):2316–23.
20. Zhang L, Lu S, Feng J, Dechaphunkul A, Chang J, Wang D, et al. A Randomized Phase 3 Study Evaluating the Efficacy of Single-dose NEPA, a Fixed Antiemetic Combination of Netupitant and Palonosetron, Versus an Aprepitant Regimen for Prevention of Chemotherapy-induced Nausea and Vomiting (CINV) in Patients Receiving Highly Emetogenic Chemotherapy (HEC). Ann Oncol. 2017 Oct 28;
21. Ito Y, Tsuda T, Minatogawa H, Kano S, Sakamaki K, Ando M, et al. Placebo-Controlled, Double-Blinded Phase III Study Comparing Dexamethasone on Day 1 With Dexamethasone on Days 1 to 3 With Combined Neurokinin-1 Receptor Antagonist and Palonosetron in High-Emetogenic Chemotherapy. Journal of Clinical Oncology. 2018 Apr;36(10):1000–6.
22. Botteman M, Nickel K, Corman S, Turini M, Binder G. Cost-effectiveness of a fixed combination of netupitant and palonosetron (NEPA) relative to aprepitant plus granisetron (APR + GRAN) for prophylaxis of chemotherapy-induced nausea and vomiting (CINV): a trial-based analysis. Support Care Cancer. 2020 Feb;28(2):857–66.
23. Fonte C, Fatigoni S, Roila F. A review of olanzapine as an antiemetic in chemotherapy-induced nausea and vomiting and in palliative care patients. Crit Rev Oncol Hematol. 2015 Aug;95(2):214–21.
24. Navari RM, Qin R, Ruddy KJ, Liu H, Powell SF, Bajaj M, et al. Olanzapine for the Prevention of Chemotherapy-Induced Nausea and Vomiting. N Engl J Med. 2016 Jul 14;375(2):134–42.
25. Zhou JG, Huang L, Jin SH, Xu C, Frey B, Ma H, et al. Olanzapine combined with 5-hydroxytryptamine type 3 receptor antagonist (5-HT3 RA) plus dexamethasone for prevention and treatment of chemotherapy-induced nausea and vomiting in high and moderate emetogenic chemotherapy: a systematic review and meta-analysis of randomised controlled trials. ESMO Open. 2020 Feb;5(1):e000621.
26. Hesketh PJ, Kris MG, Basch E, Bohlke K, Barbour SY, Clark-Snow RA, et al. Antiemetics: American Society of Clinical Oncology Clinical Practice Guideline Update. J Clin Oncol. 2017 Oct 1;35(28):3240–61.
27. Herrstedt J, Roila F, Warr D, Celio L, Navari RM, Hesketh PJ, et al. 2016 Updated MASCC/ESMO Consensus Recommendations: Prevention of Nausea and Vomiting Following High Emetic Risk Chemotherapy. Support Care Cancer. 2017 Jan;25(1):277–88.
28. Chow R, Valdez C, Chow N, Zhang D, Im J, Sodhi E, et al. Oral cannabinoid for the prophylaxis of chemotherapy-induced nausea and vomiting-a systematic review and meta-analysis. Support Care Cancer. 2020 May;28(5):2095–103.

29. Widgren Y, Enblom A. Emesis in patients receiving acupuncture, sham acupuncture or standard care during chemo-radiation: A randomized controlled study. Complement Ther Med. 2017 Oct;34:16–25.
30. Chen B, Guo Y, Zhao X, Gao LL, Li B, Zhao TY, et al. Efficacy differences of electroacupuncture with single acupoint or matching acupoints for chemotherapy-induced nausea and vomiting: study protocol for a randomized controlled trial. Trials. 2017 Oct 13;18(1):477.
31. Gao L, Chen B, Zhang Q, Zhao T, Li B, Sha T, et al. Acupuncture with different acupoint combinations for chemotherapy-induced nausea and vomiting: study protocol for a randomized controlled trial. BMC Complement Altern Med. 2016 Nov 8;16(1):441.
32. Li QW, Yu MW, Yang GW, Wang XM, Wang H, Zhang CX, et al. Effect of acupuncture in prevention and treatment of chemotherapy-induced nausea and vomiting in patients with advanced cancer: study protocol for a randomized controlled trial. Trials. 2017 20;18(1):185.
33. Roila F, Molassiotis A, Herrstedt J, Aapro M, Gralla RJ, Bruera E, et al. 2016 MASCC and ESMO guideline update for the prevention of chemotherapy- and radiotherapy-induced nausea and vomiting and of nausea and vomiting in advanced cancer patients. Ann Oncol. 2016 Sep;27(suppl 5):v119–33.
34. Hesketh PJ, Bohlke K, Lyman GH, Basch E, Chesney M, Clark-Snow RA, et al. Antiemetics: American Society of Clinical Oncology Focused Guideline Update. J Clin Oncol. 2016 Feb 1;34(4):381–6.
35. Razvi Y, Chan S, McFarlane T, McKenzie E, Zaki P, DeAngelis C, et al. ASCO, NCCN, MASCC/ESMO: a comparison of antiemetic guidelines for the treatment of chemotherapy-induced nausea and vomiting in adult patients. Support Care Cancer. 2019 Jan;27(1):87–95.
36. Grunberg SM, Warr D, Gralla RJ, Rapoport BL, Hesketh PJ, Jordan K, et al. Evaluation of new antiemetic agents and definition of antineoplastic agent emetogenicity--state of the art. Support Care Cancer. 2011 Mar;19 Suppl 1:S43-47.
37. Aapro MS, Bohlius J, Cameron DA, Dal Lago L, Donnelly JP, Kearney N, et al. 2010 update of EORTC guidelines for the use of granulocyte-colony stimulating factor to reduce the incidence of chemotherapy-induced febrile neutropenia in adult patients with lymphoproliferative disorders and solid tumours. Eur J Cancer. 2011 Jan;47(1):8–32.
38. Crawford J, Caserta C, Roila F, ESMO Guidelines Working Group. Hematopoietic growth factors: ESMO Clinical Practice Guidelines for the applications. Ann Oncol. 2010 May;21 Suppl 5:v248-251.
39. Smith TJ, Bohlke K, Lyman GH, Carson KR, Crawford J, Cross SJ, et al. Recommendations for the Use of WBC Growth Factors: American Society of Clinical Oncology Clinical Practice Guideline Update. Journal of Clinical Oncology. 2015 Oct 1;33(28):3199–212.
40. Xu H, Gong Q, Vogl FD, Reiner M, Page JH. Risk factors for bone pain among patients with cancer receiving myelosuppressive chemotherapy and pegfilgrastim. Support Care Cancer. 2016 Feb;24(2):723–30.
41. Lyman GH, Dale DC, Wolff DA, Culakova E, Poniewierski MS, Kuderer NM, et al. Acute myeloid leukemia or myelodysplastic syndrome in randomized controlled clinical trials of cancer chemotherapy with granulocyte colony-stimulating factor: a systematic review. J Clin Oncol. 2010 Jun 10;28(17):2914–24.
42. Klastersky J, de Naurois J, Rolston K, Rapoport B, Maschmeyer G, Aapro M, et al. Management of febrile neutropaenia: ESMO Clinical Practice Guidelines. Ann Oncol. 2016 Sep;27(suppl 5):v111–8.
43. Crawford J, Becker PS, Armitage JO, Blayney DW, Chavez J, Curtin P, et al. Myeloid Growth Factors, Version 2.2017, NCCN Clinical Practice Guidelines in Oncology. Journal of the National Comprehensive Cancer Network. 2017 Dec;15(12):1520–41.
44. Crawford J, Armitage J, Balducci L, Becker PS, Blayney DW, Cataland SR, et al. Myeloid growth factors. J Natl Compr Canc Netw. 2013 Oct 1;11(10):1266–90.
45. Smith TJ, Khatcheressian J, Lyman GH, Ozer H, Armitage JO, Balducci L, et al. 2006 update of recommendations for the use of white blood cell growth factors: an evidence-based clinical practice guideline. J Clin Oncol. 2006 Jul 1;24(19):3187–205.
46. Rapoport BL, Aapro M, Paesmans M, van Eeden R, Smit T, Krendyukov A, et al. Febrile neutropenia (FN) occurrence outside of clinical trials: occurrence and predictive factors in adult patients treated with chemotherapy and an expected moderate FN risk. Rationale and design of a real-world prospective, observational, multinational study. BMC Cancer [Internet]. 2018 Dec [cited 2019 Jan 2];18(1). Available from: https://bmccancer.biomedcentral.com/articles/10.1186/s12885-018-4838-z
47. Crawford J, Dale DC, Kuderer NM, Culakova E, Poniewierski MS, Wolff D, et al. Risk and timing of neutropenic events in adult cancer patients receiving chemotherapy: the results of a prospective nationwide study of oncology practice. J Natl Compr Canc Netw. 2008 Feb;6(2):109–18.
48. Bennett CL, Djulbegovic B, Norris LB, Armitage JO. Colony-stimulating factors for febrile neutropenia during cancer therapy. N Engl J Med. 2013 Mar 21;368(12):1131–9.
49. Crawford J, Dale DC, Kuderer NM, Culakova E, Poniewierski MS, Wolff D, et al. Risk and timing of neutropenic events in adult cancer patients receiving chemotherapy: the results of a prospective nationwide study of oncology practice. J Natl Compr Canc Netw. 2008 Feb;6(2):109–18.
50. Gridelli C, de Marinis F, Thomas M, Prabhash K, El Kouri C, Blackhall F, et al. Final efficacy and safety results of pemetrexed continuation maintenance therapy in the elderly from the PARAMOUNT phase III study. J Thorac Oncol. 2014 Jul;9(7):991–7.
51. Gridelli C, Brodowicz T, Langer CJ, Peterson P, Islam M, Guba SC, et al. Pemetrexed therapy in elderly patients with good performance status: analysis of two phase III trials of patients with nonsquamous non-small-cell lung cancer. Clin Lung Cancer. 2012 Sep;13(5):340–6.
52. Sheikh H, Colaco R, Lorigan P, Blackhall F, Califano R, Ashcroft L, et al. Use of G-CSF during concurrent chemotherapy and thoracic radiotherapy in patients with limited-stage small-cell lung cancer safety data from a phase II trial. Lung Cancer. 2011 Oct;74(1):75–9.
53. Taplitz RA, Kennedy EB, Bow EJ, Crews J, Gleason C, Hawley DK, et al. Antimicrobial Prophylaxis for Adult Patients With Cancer-Related Immunosuppression: ASCO and IDSA Clinical Practice Guideline Update. Journal of Clinical Oncology. 2018 Oct 20;36(30):3043–54.
54. Skoetz N, Bohlius J, Engert A, Monsef I, Blank O, Vehreschild JJ. Prophylactic antibiotics or G(M)-CSF for the prevention of infections and improvement of survival in cancer patients receiving myelotoxic chemotherapy. Cochrane Database Syst Rev. 2015 Dec 21;(12):CD007107.
55. Réseau Régional de Cancérologie Rhône-Alpes Auvergne. Référentiel soins oncologiques de support. (consulté le 13/10/2011) [Internet]. 2010. Available from: http://www.rrc-ra.fr/Ressources/referentiels/PRA-SOS-1012ANEMIE.pdf
56. Campos MPO, Hassan BJ, Riechelmann R, Del Giglio A. Cancer-related fatigue: a practical review. Ann Oncol. 2011 Jun;22:1273–9.
57. Schrijvers D, De Samblanx H, Roila F, ESMO Guidelines Working Group. Erythropoiesis-stimulating agents in the treatment of anaemia in cancer patients: ESMO Clinical Practice Guidelines for use. Ann Oncol. 2010 May;21 Suppl 5:v244-247.
58. Watkins T, Surowiecka MK, McCullough J. Transfusion indications for patients with cancer. Cancer Control. 2015 Jan;22(1):38–46.

59. Aapro M, Beguin Y, Bokemeyer C, Dicato M, Gascón P, Glaspy J, et al. Management of anaemia and iron deficiency in patients with cancer: ESMO Clinical Practice Guidelines. Ann Oncol. 2018 Oct 1;29(Supplement_4):iv271.
60. Rizzo JD, Brouwers M, Hurley P, Seidenfeld J, Arcasoy MO, Spivak JL, et al. American Society of Clinical Oncology/American Society of Hematology clinical practice guideline update on the use of epoetin and darbepoetin in adult patients with cancer. J Clin Oncol. 2010 Nov 20;28(33):4996–5010.
61. Tonia T, Mettler A, Robert N, Schwarzer G, Seidenfeld J, Weingart O, et al. Erythropoietin or darbepoetin for patients with cancer. Cochrane Database Syst Rev. 2012 Dec 12;12:CD003407.
62. Grant MD, Piper M, Bohlius J, Tonia T, Robert N, Vats V, et al. Epoetin and Darbepoetin for Managing Anemia in Patients Undergoing Cancer Treatment: Comparative Effectiveness Update [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2013 [cited 2016 Jan 28]. (AHRQ Comparative Effectiveness Reviews). Available from: http://www.ncbi.nlm.nih.gov/books/NBK143013/
63. Mhaskar R, Wao H, Miladinovic B, Kumar A, Djulbegovic B. The role of iron in the management of chemotherapy-induced anemia in cancer patients receiving erythropoiesis-stimulating agents. Cochrane Database Syst Rev. 2016 Feb 4;2:CD009624.
64. Petrelli F, Borgonovo K, Cabiddu M, Lonati V, Barni S. Addition of iron to erythropoiesis-stimulating agents in cancer patients: a meta-analysis of randomized trials. J Cancer Res Clin Oncol. 2012 Feb;138(2):179–87.
65. Pedrazzoli P, Farris A, Del Prete S, Del Gaizo F, Ferrari D, Bianchessi C, et al. Randomized trial of intravenous iron supplementation in patients with chemotherapy-related anemia without iron deficiency treated with darbepoetin alpha. J Clin Oncol. 2008 Apr 1;26(10):1619–25.
66. Steensma DP, Sloan JA, Dakhil SR, Dalton R, Kahanic SP, Prager DJ, et al. Phase III, randomized study of the effects of parenteral iron, oral iron, or no iron supplementation on the erythropoietic response to darbepoetin alfa for patients with chemotherapy-associated anemia. J Clin Oncol. 2011 Jan 1;29(1):97–105.
67. Canon JL, Vansteenkiste J, Hedenus M, Gascon P, Bokemeyer C, Ludwig H, et al. Transfusion risk in cancer patients with chemotherapy-induced anemia when initiating darbepoetin alfa therapy at a baseline hemoglobin level of <9 g/dL versus 9 to <10 g/dL versus ≥ 10 g/dL: an exploratory analysis of a phase 3 trial. Med Oncol. 2012 Sep;29(3):2291–9.
68. Pirker R, Hedenus M, Vansteenkiste J, Hernandez E, Belton L, Terwey JH. Effectiveness of Darbepoetin Alfa for Chemotherapy-induced Anemia When Initiated at Hemoglobin ≤10 g/dL. Clin Ther. 2016 Jan 1;38(1):122-135.e6.
69. Kenney B, Stack G. Drug-induced thrombocytopenia. Arch Pathol Lab Med. 2009 Feb;133(2):309–14.
70. Schiffer CA, Bohlke K, Delaney M, Hume H, Magdalinski AJ, McCullough JJ, et al. Platelet Transfusion for Patients With Cancer: American Society of Clinical Oncology Clinical Practice Guideline Update. J Clin Oncol. 2018 Jan 20;36(3):283–99.
71. Slichter SJ. Evidence-based platelet transfusion guidelines. Hematology Am Soc Hematol Educ Program. 2007;172–8.
72. Liumbruno G, Bennardello F, Lattanzio A, Piccoli P, Rossetti G, Italian Society of Transfusion Medicine and Immunohaematology (SIMTI) Work Group. Recommendations for the transfusion of plasma and platelets. Blood Transfus. 2009 Apr;7(2):132–50.
73. Trüeb RM. Chemotherapy-induced alopecia. Semin Cutan Med Surg. 2009 Mar;28(1):11–4.
74. Institut National du Cancer. Traitements du cancer et chute de cheveux [Internet]. Available from: http://www.e-cancer.fr/content/download/63520/571469/file/Traitement-du-cancer-et-chute-des-cheveux.pdf
75. Shin H, Jo SJ, Kim DH, Kwon O, Myung SK. Efficacy of interventions for prevention of chemotherapy-induced alopecia: a systematic review and meta-analysis. Int J Cancer. 2015 Mar 1;136(5):E442-454.
76. Perez-Soler R, Cappuzzo F, Leon L, Wojtowicz-Prag S. Time course of skin toxicity (tox) secondary to erlotinib (E) therapy in patients (pts) with non-small cell lung cancer (NSCLC) enrolled in the SATURN study. J Clin Oncol. 29(15).
77. Joshi SS, Ortiz S, Witherspoon JN, Rademaker A, West DP, Anderson R, et al. Effects of epidermal growth factor receptor inhibitor-induced dermatologic toxicities on quality of life. Cancer. 2010 Aug 15;116(16):3916–23.
78. Lacouture ME, Anadkat MJ, Bensadoun RJ, Bryce J, Chan A, Epstein JB, et al. Clinical practice guidelines for the prevention and treatment of EGFR inhibitor-associated dermatologic toxicities. Support Care Cancer. 2011 Aug;19(8):1079–95.
79. Bachet JB, Peuvrel L, Bachmeyer C, Reguiai Z, Gourraud PA, Bouché O, et al. Folliculitis induced by EGFR inhibitors, preventive and curative efficacy of tetracyclines in the management and incidence rates according to the type of EGFR inhibitor administered: a systematic literature review. Oncologist. 2012;17(4):555–68.
80. Bouhassira D, Attal N, Alchaar H, Boureau F, Brochet B, Bruxelle J, et al. Comparison of pain syndromes associated with nervous or somatic lesions and development of a new neuropathic pain diagnostic questionnaire (DN4). Pain. 2005 Mar;114(1–2):29–36.
81. Kerckhove N, Collin A, Condé S, Chaleteix C, Pezet D, Balayssac D. Long-Term Effects, Pathophysiological Mechanisms, and Risk Factors of Chemotherapy-Induced Peripheral Neuropathies: A Comprehensive Literature Review. Front Pharmacol. 2017;8:86.
82. Cioroiu C, Weimer LH. Update on Chemotherapy-Induced Peripheral Neuropathy. Curr Neurol Neurosci Rep. 2017 Jun;17(6):47.
83. Loprinzi CL, Lacchetti C, Bleeker J, Cavaletti G, Chauhan C, Hertz DL, et al. Prevention and Management of Chemotherapy-Induced Peripheral Neuropathy in Survivors of Adult Cancers: ASCO Guideline Update. J Clin Oncol. 2020 Oct 1;38(28):3325–48.
84. Hershman DL, Unger JM, Crew KD, Minasian LM, Awad D, Moinpour CM, et al. Randomized double-blind placebo-controlled trial of acetyl-L-carnitine for the prevention of taxane-induced neuropathy in women undergoing adjuvant breast cancer therapy. J Clin Oncol. 2013 Jul 10;31(20):2627–33.
85. Leal AD, Qin R, Atherton PJ, Haluska P, Behrens RJ, Tiber CH, et al. North Central Cancer Treatment Group/Alliance trial N08CA-the use of glutathione for prevention of paclitaxel/carboplatin-induced peripheral neuropathy: a phase 3 randomized, double-blind, placebo-controlled study. Cancer. 2014 Jun 15;120(12):1890–7.
86. Seretny M, Colvin L, Fallon M. Therapy for chemotherapy-induced peripheral neuropathy. JAMA. 2013 Aug 7;310(5):537–8.
87. Smith EML, Pang H. Therapy for chemotherapy-induced peripheral neuropathy--in reply. JAMA. 2013 Aug 7;310(5):538.
88. Smith EML, Pang H, Cirrincione C, Fleishman S, Paskett ED, Ahles T, et al. Effect of duloxetine on pain, function, and quality of life among patients with chemotherapy-induced painful peripheral neuropathy: a randomized clinical trial. JAMA. 2013 Apr 3;309(13):1359–67.
89. Farshchian N, Alavi A, Heydarheydari S, Moradian N. Comparative study of the effects of venlafaxine and duloxetine on chemotherapy-induced peripheral neuropathy. Cancer Chemother Pharmacol. 2018 Nov;82(5):787–93.
90. Kleckner IR, Kamen C, Gewandter JS, Mohile NA, Heckler CE, Culakova E, et al. Effects of exercise during chemotherapy on chemotherapy-induced peripheral neuropathy: a multicenter, randomized controlled trial. Support Care Cancer. 2018 Apr;26(4):1019–28.

91. Oldervoll LM, Loge JH, Lydersen S, Paltiel H, Asp MB, Nygaard UV, et al. Physical exercise for cancer patients with advanced disease: a randomized controlled trial. Oncologist. 2011;16(11):1649–57.
92. Steindorf K, Schmidt ME, Klassen O, Ulrich CM, Oelmann J, Habermann N, et al. Randomized, controlled trial of resistance training in breast cancer patients receiving adjuvant radiotherapy: results on cancer-related fatigue and quality of life. Ann Oncol. 2014 Nov;25(11):2237–43.
93. Cavalheri V, Tahirah F, Nonoyama M, Jenkins S, Hill K. Exercise training for people following lung resection for non-small cell lung cancer - a Cochrane systematic review. Cancer Treat Rev. 2014 May;40(4):585–94.
94. Granger CL, McDonald CF, Berney S, Chao C, Denehy L. Exercise intervention to improve exercise capacity and health related quality of life for patients with Non-small cell lung cancer: a systematic review. Lung Cancer. 2011 May;72(2):139–53.
95. Jones LW, Hornsby WE, Goetzinger A, Forbes LM, Sherrard EL, Quist M, et al. Prognostic significance of functional capacity and exercise behavior in patients with metastatic non-small cell lung cancer. Lung Cancer. 2012 May;76(2):248–52.
96. Salakari MRJ, Surakka T, Nurminen R, Pylkkänen L. Effects of rehabilitation among patients with advances cancer: a systematic review. Acta Oncol. 2015 May;54(5):618–28.
97. Hwang CL, Yu CJ, Shih JY, Yang PC, Wu YT. Effects of exercise training on exercise capacity in patients with non-small cell lung cancer receiving targeted therapy. Support Care Cancer. 2012 Dec;20(12):3169–77.
98. Gyan E, Raynard B, Durand JP, Lacau Saint Guily J, Gouy S, Movschin ML, et al. Malnutrition in Patients With Cancer: Comparison of Perceptions by Patients, Relatives, and Physicians-Results of the NutriCancer2012 Study. JPEN J Parenter Enteral Nutr. 2018 Jan;42(1):255–60.
99. Senesse P, Bachmann P, Bensadoun RJ, Besnard I, Bourdel-Marchasson I, Bouteloup C, et al. Nutrition chez le patient adulte atteint de cancer : textes courts. Nutrition Clinique et Métabolisme. 2012 Dec;26(4):151–8.
100. Xará S, Amaral TF, Parente B. [Undernutrition and quality of life in non small cell lung cancer patients]. Rev Port Pneumol. 2011 Aug;17(4):153–8.
101. Ross PJ, Ashley S, Norton A, Priest K, Waters JS, Eisen T, et al. Do patients with weight loss have a worse outcome when undergoing chemotherapy for lung cancers? Br J Cancer. 2004 May 17;90(10):1905–11.
102. Arends J, Baracos V, Bertz H, Bozzetti F, Calder PC, Deutz NEP, et al. ESPEN expert group recommendations for action against cancer-related malnutrition. Clin Nutr. 2017 Oct;36(5):1187–96.
103. Thibault R, Goujon N, Le Gallic E, Clairand R, Sébille V, Vibert J, et al. Use of 10-point analogue scales to estimate dietary intake: a prospective study in patients nutritionally at-risk. Clin Nutr. 2009 Apr;28(2):134–40.
104. Bauer J, Capra S, Ferguson M. Use of the scored Patient-Generated Subjective Global Assessment (PG-SGA) as a nutrition assessment tool in patients with cancer. Eur J Clin Nutr. 2002 Aug;56(8):779–85.
105. Chambrier C, Sztark F, Société Francophone de nutrition clinique et métabolisme (SFNEP), Société française d'anesthésie et réanimation (SFAR). French clinical guidelines on perioperative nutrition. Update of the 1994 consensus conference on perioperative artificial nutrition for elective surgery in adults. J Visc Surg. 2012 Oct;149(5):e325-336.
106. Crandall K, Maguire R, Campbell A, Kearney N. Exercise intervention for patients surgically treated for Non-Small Cell Lung Cancer (NSCLC): a systematic review. Surg Oncol. 2014 Mar;23(1):17–30.
107. Arends J, Bodoky G, Bozzetti F, Fearon K, Muscaritoli M, Selga G, et al. ESPEN Guidelines on Enteral Nutrition: Non-surgical oncology. Clin Nutr. 2006 Apr;25(2):245–59.
108. Cramp F, Byron-Daniel J. Exercise for the management of cancer-related fatigue in adults. Cochrane Database Syst Rev. 2012 Nov 14;11:CD006145.
109. Quilliot D, Michot N, Germain L, Krier J, Lopez A, Bresler L, et al. Feasibility, acceptability of enteral tube feeding and self-insertion of a nasogastric tube in the nutritional management of digestive cancers, impact on quality of life. Clin Nutr. 2020 Jun;39(6):1785–92.
110. Wouters Y, Theilla M, Singer P, Tribler S, Jeppesen PB, Pironi L, et al. Randomised clinical trial: 2% taurolidine versus 0.9% saline locking in patients on home parenteral nutrition. Aliment Pharmacol Ther. 2018 Aug;48(4):410–22.
111. Spasovski G, Vanholder R, Allolio B, Annane D, Ball S, Bichet D, et al. Clinical practice guideline on diagnosis and treatment of hyponatraemia. Nephrol Dial Transplant. 2014 Apr;29 Suppl 2:i1–39.
112. Gralla RJ, Ahmad F, Blais JD, Chiodo J, Zhou W, Glaser LA, et al. Tolvaptan use in cancer patients with hyponatremia due to the syndrome of inappropriate antidiuretic hormone: a post hoc analysis of the SALT-1 and SALT-2 trials. Cancer Med. 2017 Apr;6(4):723–9.
113. Verbalis JG, Goldsmith SR, Greenberg A, Korzelius C, Schrier RW, Sterns RH, et al. Diagnosis, evaluation, and treatment of hyponatremia: expert panel recommendations. Am J Med. 2013 Oct;126(10 Suppl 1):S1-42.
114. Mackall CL. T-cell immunodeficiency following cytotoxic antineoplastic therapy: a review. Stem Cells. 2000;18(1):10–8.
115. Spagnolo F, Boutros A, Croce E, Cecchi F, Arecco L, Tanda E, et al. Influenza vaccination in cancer patients receiving immune checkpoint inhibitors: A systematic review. Eur J Clin Invest. 2021 Jul;51(7):e13604.
116. Desage AL, Bouleftour W, Rivoirard R, Magne N, Collard O, Fournel P, et al. Vaccination and Immune Checkpoint Inhibitors: Does Vaccination Increase the Risk of Immune-related Adverse Events? A Systematic Review of Literature. Am J Clin Oncol. 2021 Mar 1;44(3):109–13.
117. Corti C, Antonarelli G, Scotté F, Spano JP, Barrière J, Michot JM, et al. Seroconversion rate after vaccination against COVID-19 in cancer patients-a systematic review. Ann Oncol. 2021 Oct 28;S0923-7534(21)04550-6.
118. Widman AJ, Cohen B, Park V, McClure T, Wolchok J, Kamboj M. Immune-Related Adverse Events Among COVID-19-Vaccinated Patients With Cancer Receiving Immune Checkpoint Blockade. J Natl Compr Canc Netw. 2022 Oct;20(10):1134–8.
119. Yang W, Zhang D, Li Z, Zhang K. Predictors of poor serologic response to COVID-19 vaccine in patients with cancer: a systematic review and meta-analysis. Eur J Cancer. 2022 Sep;172:41–50.
120. Mei Q, Hu G, Yang Y, Liu B, Yin J, Li M, et al. Impact of COVID-19 vaccination on the use of PD-1 inhibitor in treating patients with cancer: a real-world study. J Immunother Cancer. 2022 Mar;10(3):e004157.
121. Tougeron D, Hentzien M, Seitz-Polski B, Bani-Sadr F, Bourhis J, Ducreux M, et al. Severe acute respiratory syndrome coronavirus 2 vaccination for patients with solid cancer: Review and point of view of a French oncology intergroup (GCO, TNCD, UNICANCER). Eur J Cancer. 2021 Jun;150:232–9.
122. Gauci ML, Coutzac C, Houot R, Marabelle A, Lebbé C, FITC. SARS-CoV-2 vaccines for cancer patients treated with immunotherapies: Recommendations from the French society for ImmunoTherapy of Cancer (FITC). Eur J Cancer. 2021 May;148:121–3.

123. Haanen JBAG, Carbonnel F, Robert C, Kerr KM, Peters S, Larkin J, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up†. Annals of Oncology. 2017 Jul;28(suppl_4):iv119–42.
124. Champiat S, Lambotte O, Barreau E, Belkhir R, Berdelou A, Carbonnel F, et al. Management of immune checkpoint blockade dysimmune toxicities: a collaborative position paper. Annals of Oncology. 2016 Apr;27(4):559–74.
125. Sgambato A, Casaluce F, Sacco PC, Palazzolo G, Maione P, Rossi A, et al. Anti PD-1 and PDL-1 Immunotherapy in the Treatment of Advanced Non- Small Cell Lung Cancer (NSCLC): A Review on Toxicity Profile and its Management. Curr Drug Saf. 2016;11(1):62–8.
126. Naidoo J, Wang X, Woo KM, Iyriboz T, Halpenny D, Cunningham J, et al. Pneumonitis in Patients Treated With Anti-Programmed Death-1/Programmed Death Ligand 1 Therapy. J Clin Oncol. 2017 Mar;35(7):709–17.
127. Delaunay M, Cadranel J, Lusque A, Meyer N, Gounant V, Moro-Sibilot D, et al. Immune-checkpoint inhibitors associated with interstitial lung disease in cancer patients. Eur Respir J. 2017;50(2).
128. Brahmer JR, Lacchetti C, Schneider BJ, Atkins MB, Brassil KJ, Caterino JM, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: American Society of Clinical Oncology Clinical Practice Guideline. J Clin Oncol. 2018 10;36(17):1714–68.
129. Castinetti F, Albarel F, Archambeaud F, Bertherat J, Bouillet B, Buffier P, et al. Endocrine side-effects of new anticancer therapies: Overall monitoring and conclusions. Ann Endocrinol (Paris). 2018 Oct;79(5):591–5.
130. Horn L, Spigel DR, Vokes EE, Holgado E, Ready N, Steins M, et al. Nivolumab Versus Docetaxel in Previously Treated Patients With Advanced Non-Small-Cell Lung Cancer: Two-Year Outcomes From Two Randomized, Open-Label, Phase III Trials (CheckMate 017 and CheckMate 057). J Clin Oncol. 2017 Dec 10;35(35):3924–33.
131. Haanen JB a. G, Carbonnel F, Robert C, Kerr KM, Peters S, Larkin J, et al. Management of toxicities from immunotherapy: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Ann Oncol. 2018 01;29(Suppl 4):iv264–6.
132. World Health Organization. WHO global report on traditional and complementary medicine 2019 [Internet]. WHO; 2019 [cited 2019 Jun 11]. Available from: https://www.who.int/traditional-complementary-integrative-medicine/en/
133. Johnson SB, Park HS, Gross CP, Yu JB. Use of Alternative Medicine for Cancer and Its Impact on Survival. J Natl Cancer Inst. 2018 01;110(1).
134. Johnson SB, Park HS, Gross CP, Yu JB. Complementary Medicine, Refusal of Conventional Cancer Therapy, and Survival Among Patients With Curable Cancers. JAMA Oncol. 2018 01;4(10):1375–81.
135. Witt CM, Balneaves LG, Cardoso MJ, Cohen L, Greenlee H, Johnstone P, et al. A Comprehensive Definition for Integrative Oncology. J Natl Cancer Inst Monographs. 2017 01;2017(52).
136. Le Rhun E, Devos P, Bourg V, Darlix A, Lorgis V, Ahle G, et al. Complementary and alternative medicine use in glioma patients in France. J Neurooncol. 2019 Oct 21;
137. Gras M, Vallard A, Brosse C, Beneton A, Sotton S, Guyotat D, et al. Use of Complementary and Alternative Medicines among Cancer Patients: A Single-Center Study. Oncology. 2019;97(1):18–25.
138. Rossanaly Vasram R, Zysman M, Ribeiro Baptista B, Ederle C, Nguyen-Thi PL, Clement-Duchene C, et al. [Complementary and alternative medicine use by lung cancer patients]. Rev Pneumol Clin. 2017 Sep;73(4):172–9.
139. Saghatchian M, Bihan C, Chenailler C, Mazouni C, Dauchy S, Delaloge S. Exploring frontiers: use of complementary and alternative medicine among patients with early-stage breast cancer. Breast. 2014 Jun;23(3):279–85.
140. Simon L, Prebay D, Beretz A, Bagot JL, Lobstein A, Rubinstein I, et al. [Complementary and alternative medicines taken by cancer patients]. Bull Cancer. 2007 May;94(5):483–8.
141. Ninot G, Boulze-Launay I, Bourrel G, Gérazime A, Guerdoux-Ninot E, Lognos B, et al. De la définition des interventions non médicamenteuses à leur ontologie. HEGEL [Internet]. 2018 [cited 2019 Nov 8];(1). Available from: http://hdl.handle.net/2042/65114
142. Murat-Ringot A, Preau M, Piriou V. [Complementary and alternative medicine in cancer patients and randomized controlled trials]. Bull Cancer. 2021 Jan;108(1):102–16.
143. Bontoux D, Couturier D, Menkès CJ, au nom d'un groupe de travail de la commission XV. THÉRAPIES COMPLÉMENTAIRES - acupuncture, hypnose, ostéopathie, tai-chi - leur place parmi les ressources de soins [Internet]. Académie Nationale de médecine; 2013 Mar [cited 2019 Nov 8]. Available from: http://www.academie-medecine.fr/wp-content/uploads/2013/07/4.rapport-Th%C3%A9rapies-compl%C3%A9mentaires1.pdf
144. Greenlee H, DuPont-Reyes MJ, Balneaves LG, Carlson LE, Cohen MR, Deng G, et al. Clinical practice guidelines on the evidence-based use of integrative therapies during and after breast cancer treatment. CA Cancer J Clin. 2017 06;67(3):194–232.
145. Mastroianni B, Lochmann M, Girodet M, Blay JY, Christophe V, Chvetzoff G. [Integrative oncology: Report and place for a dedicated consultation in a comprehensive cancer center]. Bull Cancer. 2022 Dec;109(12):1308–14.
146. Staun M, Pironi L, Bozzetti F, Baxter J, Forbes A, Joly F, et al. ESPEN Guidelines on Parenteral Nutrition: home parenteral nutrition (HPN) in adult patients. Clin Nutr. 2009 Aug;28(4):467–79.
147. Bozzetti F, Arends J, Lundholm K, Micklewright A, Zurcher G, Muscaritoli M, et al. ESPEN Guidelines on Parenteral Nutrition: non-surgical oncology. Clin Nutr. 2009 Aug;28(4):445–54.
148. Cozzaglio L, Balzola F, Cosentino F, DeCicco M, Fellagara P, Gaggiotti G, et al. Outcome of cancer patients receiving home parenteral nutrition. Italian Society of Parenteral and Enteral Nutrition (S.I.N.P.E.). JPEN J Parenter Enteral Nutr. 1997 Dec;21(6):339–42.