

# Contemporary publication patterns in the Journal of Cachexia, Sarcopenia and Muscle by type and sub-speciality: facts and numbers

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## Introduction

The Journal of Cachexia, Sarcopenia and Muscle (JCSM) has progressed significantly in the past three years, not only both in terms of its number of submitted and published articles but also in terms of greater impact, reaching an Impact Factor of over 12 in the most recently published analyses by Clarivate Analytics. It remains the leading specialist journal in this new but now rapidly expanding field, and it appears to cover the full spectrum of research from basic science, to clinical observations and randomized controlled trials (RCT's) and meta-analyses.

To investigate the fields covered and analyse contemporary patterns of output in the different subspecialist fields of cachexia and related areas (sarcopenia, muscle wasting, and body composition) we analysed output from the journal over the last 3 years, including this issue. We conducted an analysis of the types of publications in the respective medical sub-specialities that this major cachexia focussed journal, JCSM, has published in the last three calendar years and analysed trends within each sub-discipline. Publications are classified into (i) original research articles (clinical observations), (ii) original research articles (translational science), (iii) randomized controlled trials (RCT's) or meta-analyses of RCT's, and (iv) opinion pieces or commentaries. Furthermore, they are classified into the major medical sub-specialities (including ageing) or are considered multidisciplinary if applicable across a range of specialities.

## Results

Significant research and commentary have been published in the last three years in a significant expansion of the area; 264

articles were identified in the journal. We subdivided articles by sub-speciality into the following: general cachexia (or multi-speciality), cancer, cardiovascular, respiratory, renal, liver, neuromuscular, ageing, and other (mainly rheumatology). Papers were further subdivided by type as described above.

### *By discipline*

The most frequent classification was general or multidisciplinary cachexia with 80 publications, with the most common types being original basic science (36) and clinical observational studies (19), noting that this area had a very large number of commentary style articles (22). The most commonly published subspecialty was cancer with 73 publications in the period and within this, by type, the most frequent were clinical observational studies (35) and original basic science (21), but also encouragingly as this field develops, here we saw the most of the RCT's or meta-analyses of RCT's type, 11 out of a total for all fields of 29. Ageing was next most frequent sub-discipline with a total of 54 publications, with 35 clinical observational studies, 10 original basic science, and 6 RCT's or meta-analyses. The other sub-disciplines were significantly less frequently published in the period: others (mainly musculoskeletal trauma or rheumatology) 14, renal 12, respiratory 9, neuromuscular disorders and liver disease 8 each, and cardiovascular 6.

### *By methodology*

The range of approaches was impressive and diverse with large scale clinical series<sup>1</sup> articles on informative clinical

series,<sup>2</sup> RCT's and meta-analyses of physical,<sup>3</sup> pharmacological,<sup>4,5</sup> and nutritional interventions<sup>6,7</sup> as well many basic science reports and reviews. For the first time, the journal was seeing Cochrane reviews of the evidence base for interventions in cachexia and related fields coming through.<sup>8,9</sup> One of the strongest emerging fields are detailed clinical series of ageing effects, both detailed physiological evaluations<sup>10,11</sup> and large scale cohort reports.<sup>12–17</sup> In the area of translational studies in the mechanisms of cachexia, studies were published on expression of spliced skeletal muscle genes,<sup>18</sup> along with scientific evaluations of skeletal muscle physiology,<sup>19,20</sup> growth, wasting,<sup>21–23</sup> preservation,<sup>24,25</sup> and regeneration.<sup>26</sup> Basic science approaches were also used to study the growing interest in the cardiac and cardio-metabolic effects of cancer-related cachexia and of modern cancer therapies.<sup>27,28</sup>

There was growing evidence for the development of clinical trials and for improvements in clinical trial methodology by the development and validation of clinical screening tools<sup>29</sup> and scoring systems,<sup>30</sup> biomarkers,<sup>31,32</sup> and evaluative methodologies, including the establishment of normal ranges.<sup>33</sup> These may help make trial design and novel treatment evaluation more precise in the future.

The future pipeline of therapeutic interventions will be enhanced by the dissemination of basic reports into preclinical models<sup>34–37</sup> and early human trials<sup>38</sup> as a way of evaluating novel interventions.<sup>39–42</sup> One of the major advantages of having JCSM as a leader in this field is that such opportunities can more easily be found, rather than being spread over dozens of different journals.

There was a noticeable increase compared to earlier years of the journal in orthopaedic and musculoskeletal clinical reports.<sup>43</sup> Liver disease<sup>44–46</sup> and chronic kidney disease<sup>47–49</sup> are two other areas showing growth in interest in cachexia and its treatment.

Detailed pathophysiology was the subject of many reports into what happens in specific cachexia syndromes<sup>50–56</sup> and in other non-cancer-related cachexia and sarcopenia syndromes.<sup>57–63</sup>

As befits a series of fields that are relatively new and not the main speciality of many practitioners, there was a large number of informative review articles,<sup>64–71</sup> as well as the emergence of reports on patient groups, commentaries, and political campaigns.<sup>72</sup>

## Conclusions

The Journal of Cachexia, Sarcopenia and Muscle (JCSM) is maintaining a broad coverage of cachexia and sarcopenia research, across the spectrum of basic science, clinical observation, interventional trials, and public health epidemiology. There is broad coverage of many sub-disciplines, and although still led by cancer related and non-specific cachexia ageing is now emerging as a major area of focus for the journal.

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The author certifies that she complies with the ethical guidelines for publishing in the Journal of Cachexia, Sarcopenia and Muscle: update 2017.<sup>73</sup>

## Conflict of Interest

The author declares that no conflict of interest relevant to this article exists.

## References

- Rutten IJ, van Dijk DP, Kruitwagen RF, Beets-Tan RG, Olde Damink SW, van Gorp T. Loss of skeletal muscle during neoadjuvant chemotherapy is related to decreased survival in ovarian cancer patients. *J Cachexia Sarcopenia Muscle* 2016 Sep;7:458–466.
- Choi MH, Oh SN, Lee IK, Oh ST, Won DD. Sarcopenia is negatively associated with long-term outcomes in locally advanced rectal cancer. *J Cachexia Sarcopenia Muscle* 2018 Feb;9:53–59.
- de Vries NM, Staal JB, van der Wees PJ, Adang EM, Akkermans R, Olde Rikkert MG, et al. Patient-centred physical therapy is (cost-) effective in increasing physical activity and reducing frailty in older adults with mobility problems: a randomized controlled trial with 6 months follow-up. *J Cachexia Sarcopenia Muscle* 2016 Sep;7:422–435.
- Stewart Coats AJ, Ho GF, Prabhaskar K, von Haehling S, Tilson J, Brown R, et al. For and on behalf of the ACT-ONE study group. Espindolol for the treatment and prevention of cachexia in patients with stage III/IV non-small cell lung cancer or colorectal cancer: a randomized, double-blind, placebo-controlled, international multicentre phase II study (the ACT-ONE trial). *J Cachexia Sarcopenia Muscle* 2016 Jun;7:355–365.
- Lainscak M, Laviano A. ACT-ONE-ACTION at last on cancer cachexia by adapting a novel action beta-blocker. *J Cachexia Sarcopenia Muscle* 2016 Sep;7:400–402.
- Mochamat CH, Marinova M, Kaasa S, Stieber C, Conrad R, Radbruch L, et al. A systematic review on the role of vitamins, minerals, proteins, and other supplements for the treatment of cachexia in cancer: a European Palliative Care Research Centre cachexia project. *J Cachexia Sarcopenia Muscle* 2017 Feb;8:25–39.
- Calder PC, Laviano A, Lonnqvist F, Muscaritoli M, Öhlander M, Schols A. Targeted medical nutrition for cachexia in chronic obstructive pulmonary disease: a randomized, controlled trial. *J Cachexia Sarcopenia Muscle* 2018 Feb;9:28–40.
- Connolly B, Salisbury L, O'Neill B, Geneen L, Douiri A, Grocott MP, et al. Exercise rehabilitation following intensive care unit discharge for recovery from critical illness: executive summary of a Cochrane Collaboration systematic review. *J Cachexia Sarcopenia Muscle* 2016 Dec;7:520–526.
- Mücke M, Mochamat CH, Peuckmann-Post V, Minton O, Stone P, Radbruch L. Pharmacological treatments for fatigue associated with palliative care: executive summary of a Cochrane Collaboration systematic review. *J Cachexia Sarcopenia Muscle* 2016 Mar;7:23–27.

10. Nederveen JP, Joannisse S, Snijders T, Ivankovic V, Baker SK, Phillips SM, et al. Skeletal muscle satellite cells are located at a closer proximity to capillaries in healthy young compared with older men. *J Cachexia Sarcopenia Muscle* 2016 Dec;7:547–554.
11. Foong YC, Chherawala N, Aitken D, Scott D, Winzenberg T, Jones G. Accelerometer-determined physical activity, muscle mass, and leg strength in community-dwelling older adults. *J Cachexia Sarcopenia Muscle* 2016 Jun;7:275–283.
12. St-Jean-Pelletier F, Pion CH, Leduc-Gaudet JP, Sgarioto N, Zovile I, Barbat-Artigas S, et al. The impact of ageing, physical activity, and pre-frailty on skeletal muscle phenotype, mitochondrial content, and intramyocellular lipids in men. *J Cachexia Sarcopenia Muscle* 2017 Apr;8:213–228.
13. Yang M, Hu X, Wang H, Zhang L, Hao Q, Dong B. Sarcopenia predicts readmission and mortality in elderly patients in acute care wards: a prospective study. *J Cachexia Sarcopenia Muscle* 2017 Apr;8:251–258.
14. Barbosa-Silva TG, Bielemann RM, Gonzalez MC, Menezes AM. Prevalence of sarcopenia among community-dwelling elderly of a medium-sized South American city: results of the COMO VAI? study. *J Cachexia Sarcopenia Muscle* 2016 May;7:136–143. Epub 2015 Jun 9. Erratum in: *J Cachexia Sarcopenia Muscle*. 2016 Sep;7(4):503.
15. Tyrovolas S, Koyanagi A, Olaya B, Ayuso-Mateos JL, Miret M, Chatterji S, et al. Factors associated with skeletal muscle mass, sarcopenia, and sarcopenic obesity in older adults: a multi-continent study. *J Cachexia Sarcopenia Muscle* 2016 Jun;7:312–321.
16. Barbat-Artigas S, Garnier S, Joffroy S, Riesco É, Sanguignol F, Vellas B, et al. Caloric restriction and aerobic exercise in sarcopenic and non-sarcopenic obese women: an observational and retrospective study. *J Cachexia Sarcopenia Muscle* 2016 Jun;7:284–289.
17. Brown JC, Harhay MO, Harhay MN. Sarcopenia and mortality among a population-based sample of community-dwelling older adults. *J Cachexia Sarcopenia Muscle* 2016 Jun;7:290–298.
18. Narasimhan A, Greiner R, Bathe OF, Baracos V, Damaraju S. Differentially expressed alternatively spliced genes in skeletal muscle from cancer patients with cachexia. *J Cachexia Sarcopenia Muscle* 2018 Feb;9:60–70.
19. Lodka D, Pahuja A, Geers-Knorr C, Scheibe RJ, Nowak M, Hamati J, et al. Muscle RING-finger 2 and 3 maintain striated-muscle structure and function. *J Cachexia Sarcopenia Muscle* 2016 May;7:165–180.
20. Hangelbroek RW, Fazelzadeh P, Tieland M, Boekschooten MV, Hooiveld GJ, van Duynhoven JP, et al. Expression of protocadherin gamma in skeletal muscle tissue is associated with age and muscle weakness. *J Cachexia Sarcopenia Muscle* 2016 Dec;7:604–614.
21. Sakuma K, Kinoshita M, Ito Y, Aizawa M, Aoi W, Yamaguchi A. p62/SQSTM1 but not LC3 is accumulated in sarcopenic muscle of mice. *J Cachexia Sarcopenia Muscle* 2016 May;7:204–212.
22. Polge C, Leulmi R, Jarzaguet M, Claustre A, Combaret L, Béchet D, et al. UBE2B is implicated in myofibrillar protein loss in catabolic C2C12 myotubes. *J Cachexia Sarcopenia Muscle* 2016 Jun;7:377–387.
23. Gaffney CJ, Shephard F, Chu J, Baillie DL, Rose A, Constantin-Teodosiu D, et al. Degenerin channel activation causes caspase-mediated protein degradation and mitochondrial dysfunction in adult *C. elegans* muscle. *J Cachexia Sarcopenia Muscle* 2016 May;7:181–192.
24. Lipina C, Hundal HS. Lipid modulation of skeletal muscle mass and function. *J Cachexia Sarcopenia Muscle* 2017 Apr;8:190–201.
25. Girón MD, Vilchez JD, Salto R, Manzano M, Sevillano N, Campos N, et al. Conversion of leucine to  $\beta$ -hydroxy- $\beta$ -methylbutyrate by  $\alpha$ -keto isocaproate dioxygenase is required for a potent stimulation of protein synthesis in L6 rat myotubes. *J Cachexia Sarcopenia Muscle* 2016 Mar;7:68–78.
26. Kowalski K, Archacki R, Archacka K, Stremińska W, Paciorek A, Gołąbek M, et al. Stromal derived factor-1 and granulocyte-colony stimulating factor treatment improves regeneration of Pax7<sup>-/-</sup> mice skeletal muscles. *J Cachexia Sarcopenia Muscle* 2016 Sep;7:483–496.
27. de Lima Junior EA, Yamashita AS, Pimentel GD, De Sousa LG, Santos RV, Gonçalves CL, et al. Doxorubicin caused severe hyperglycaemia and insulin resistance, mediated by inhibition in AMPK signalling in skeletal muscle. *J Cachexia Sarcopenia Muscle* 2016 Dec;7:615–625.
28. Toneto AT, Ferreira Ramos LA, Salomão EM, Tomasin R, Aereas MA, Gomes-Marcondes MC. Nutritional leucine supplementation attenuates cardiac failure in tumour-bearing cachectic animals. *J Cachexia Sarcopenia Muscle* 2016 Dec;7:577–586.
29. Manini TM, Clark BC. Results from a Web-based survey to identify dynapenia screening tools and risk factors. *J Cachexia Sarcopenia Muscle* 2016 Sep;7:499–500.
30. Malmstrom TK, Miller DK, Simonsick EM, Ferrucci L, Morley JE. SARC-F: a symptom score to predict persons with sarcopenia at risk for poor functional outcomes. *J Cachexia Sarcopenia Muscle* 2016 Mar;7:28–36.
31. Ishida J, Konishi M, Saitoh M, Springer J. Growth differentiation factor-15 as a prognostic biomarker in cancer patients. *J Cachexia Sarcopenia Muscle* 2016 May;7:235–236.
32. Scherbakov N, Knops M, Ebner N, Valentova M, Sandek A, Grittner U, et al. Evaluation of C-terminal agrin fragment as a marker of muscle wasting in patients after acute stroke during early rehabilitation. *J Cachexia Sarcopenia Muscle* 2016 Mar;7:60–67.
33. Leong DP, Teo KK, Rangarajan S, Kutty VR, Lanan F, Hui C, et al. Reference ranges of handgrip strength from 125,462 healthy adults in 21 countries: a prospective urban rural epidemiologic (PURE) study. *J Cachexia Sarcopenia Muscle* 2016 Dec;7:535–546.
34. Chen X, Wu Y, Yang T, Wei M, Wang Y, Deng X, et al. Salidroside alleviates cachexia symptoms in mouse models of cancer cachexia via activating mTOR signalling. *J Cachexia Sarcopenia Muscle* 2016 May;7:225–232.
35. Ferraro E, Pin F, Gorini S, Pontecorvo L, Ferri A, Mollace V, et al. Improvement of skeletal muscle performance in ageing by the metabolic modulator trimetazidine. *J Cachexia Sarcopenia Muscle* 2016 Sep;7:449–457.
36. Deval C, Capel F, Laillet B, Polge C, Béchet D, Taillandier D, et al. Docosahexaenoic acid-supplementation prior to fasting prevents muscle atrophy in mice. *J Cachexia Sarcopenia Muscle* 2016 Dec;7:587–603.
37. Musolino V, Palus S, Tschirner A, Drescher C, Gliozzi M, Carresi C, et al. Megestrol acetate improves cardiac function in a model of cancer cachexia-induced cardiomyopathy by autophagic modulation. *J Cachexia Sarcopenia Muscle* 2016 Dec;7:555–566.
38. Pinto CL, Botelho PB, Carneiro JA, Mota JF. Impact of creatine supplementation in combination with resistance training on lean mass in the elderly. *J Cachexia Sarcopenia Muscle* 2016 Sep;7:413–421.
39. Wendowski O, Redshaw Z, Mutungi G. Dihydrotestosterone treatment rescues the decline in protein synthesis as a result of sarcopenia in isolated mouse skeletal muscle fibres. *J Cachexia Sarcopenia Muscle* 2017 Feb;8:48–56.
40. Gómez-SanMiguel AB, Martín AI, Nieto-Bona MP, Fernández-Galaz C, Villanúa MÁ, López-Calderón A. The melanocortin receptor type 3 agonist d-Trp(8)- $\gamma$ MSP decreases inflammation and muscle wasting in arthritic rats. *J Cachexia Sarcopenia Muscle* 2016 Mar;7:79–89.
41. Toledo M, Penna F, Oliva F, Luque M, Batacours A, Marmonti E, et al. A multifactorial anti-cachectic approach for cancer cachexia in a rat model undergoing chemotherapy. *J Cachexia Sarcopenia Muscle* 2016 Mar;7:48–59.
42. Penna F, Bonetto A, Aversa Z, Minero VG, Rossi Fanelli F, Costelli P, et al. Effect of the specific proteasome inhibitor bortezomib on cancer-related muscle wasting. *J Cachexia Sarcopenia Muscle* 2016 Jun;7:345–354.
43. Wakabayashi H, Watanabe N, Anraku M, Oritsu H, Shimizu Y. Pre-operative psoas muscle mass and post-operative gait speed following total hip arthroplasty for osteoarthritis. *J Cachexia Sarcopenia Muscle* 2016 Mar;7:95–96.
44. Montano-Loza AJ, Angulo P, Meza-Junco J, Prado CM, Sawyer MB, Beaumont C, et al. Sarcopenic obesity and myosteatosis are associated with higher mortality in patients with cirrhosis. *J Cachexia Sarcopenia Muscle* 2016 May;7:126–135.
45. Kalafateli M, Mantzoukis K, Choi Yau Y, Mohammad AO, Arora S, Rodrigues S, et al. Malnutrition and sarcopenia predict post-liver transplantation outcomes

- independently of the model for end-stage liver disease score. *J Cachexia Sarcopenia Muscle* 2017 Feb;**8**:113–121.
46. Kazemi-Bajestani SM, Becher H, Ghosh S, Montano-Loza AJ, Baracos VE. Concurrent depletion of skeletal muscle, fat, and left ventricular mass in patients with cirrhosis of the liver. *J Cachexia Sarcopenia Muscle* 2016 Mar;**7**:97–99.
  47. Ou SM, Chen YT, Hung SC, Shih CJ, Lin CH, Chiang CK, et al. Taiwan Geriatric Kidney Disease (TGKD) Research Group. Association of estimated glomerular filtration rate with all-cause and cardiovascular mortality: the role of malnutrition-inflammation-cachexia syndrome. *J Cachexia Sarcopenia Muscle* 2016 May;**7**:144–151.
  48. Verzola D, Bonanni A, Sofia A, Montecucco F, D'Amato E, Cademartori V, et al. Toll-like receptor 4 signalling mediates inflammation in skeletal muscle of patients with chronic kidney disease. *J Cachexia Sarcopenia Muscle* 2017 Feb;**8**:131–144.
  49. Cheung WW, Cherqui S, Ding W, Esparza M, Zhou P, Shao J, et al. Muscle wasting and adipose tissue browning in infantile nephropathic cystinosis. *J Cachexia Sarcopenia Muscle* 2016 May;**7**:152–164.
  50. Molfino A, Iannace A, Colaiacomo MC, Farcomeni A, Emiliani A, Gualdi G, et al. Cancer anorexia: hypothalamic activity and its association with inflammation and appetite-regulating peptides in lung cancer. *J Cachexia Sarcopenia Muscle* 2017 Feb;**8**:40–47.
  51. Klassen O, Schmidt ME, Ulrich CM, Schneeweiss A, Potthoff K, Steindorf K, et al. Muscle strength in breast cancer patients receiving different treatment regimens. *J Cachexia Sarcopenia Muscle* 2017 Apr;**8**:305–316.
  52. Iwata Y, Suzuki N, Ohtake H, Kamauchi S, Hashimoto N, Kiyono T, et al. Cancer cachexia causes skeletal muscle damage via transient receptor potential vanilloid 2-independent mechanisms, unlike muscular dystrophy. *J Cachexia Sarcopenia Muscle* 2016 Jun;**7**:366–376.
  53. Batista ML Jr, Henriques FS, Neves RX, Oliván MR, Matos-Neto EM, Alcântara PS, et al. Cachexia-associated adipose tissue morphological rearrangement in gastrointestinal cancer patients. *J Cachexia Sarcopenia Muscle* 2016 Mar;**7**:37–47.
  54. Lerner L, Tao J, Liu Q, Nicoletti R, Feng B, Krieger B, et al. MAP 3K11/GDF15 axis is a critical driver of cancer cachexia. *J Cachexia Sarcopenia Muscle* 2016 Sep;**7**:467–482.
  55. Saitoh M, Ishida J, Konishi M, Springer J. The concept that focuses on oral motor and feeding function in cancer patients with muscle wasting: skeletal muscle mass is associated with severe dysphagia in cancer patients. *J Cachexia Sarcopenia Muscle* 2016 May;**7**:233–234.
  56. Go SI, Park MJ, Song HN, Kim HG, Kang MH, Lee HR, et al. Prognostic impact of sarcopenia in patients with diffuse large B-cell lymphoma treated with rituximab plus cyclophosphamide, doxorubicin, vincristine, and prednisone. *J Cachexia Sarcopenia Muscle* 2016 Dec;**7**:567–576.
  57. Konishi M, Ishida J, Saitoh M, Springer J. Clinical perspective for wasting in diaphragm, an ever-trained muscle. *J Cachexia Sarcopenia Muscle* 2016 Sep;**7**:497–498.
  58. Lee SY, Kim W, Park HW, Park SC, Kim IK, Chung SG. Anti-sarcopenic effects of diamino-diphenyl sulfone observed in elderly female leprosy survivors: a cross-sectional study. *J Cachexia Sarcopenia Muscle* 2016 Jun;**7**:322–329.
  59. Szulc P, Feyt C, Chapurlat R. High risk of fall, poor physical function, and low grip strength in men with fracture-the STRAMBO study. *J Cachexia Sarcopenia Muscle* 2016 Jun;**7**:299–311.
  60. Lewis A, Lee JY, Donaldson AV, Natanek SA, Vaidyanathan S, Man WD, et al. Increased expression of H19/miR-675 is associated with a low fat-free mass index in patients with COPD. *J Cachexia Sarcopenia Muscle* 2016 Jun;**7**:330–344.
  61. Johns N, Stretch C, Tan BH, Solheim TS, Sørhaug S, Stephens NA, et al. New genetic signatures associated with cancer cachexia as defined by low skeletal muscle index and weight loss. *J Cachexia Sarcopenia Muscle* 2017 Feb;**8**:122–130.
  62. Mogi M, Kohara K, Nakaoka H, Kan-No H, Tsukuda K, Wang XL, et al. Diabetic mice exhibited a peculiar alteration in body composition with exaggerated ectopic fat deposition after muscle injury due to anomalous cell differentiation. *J Cachexia Sarcopenia Muscle* 2016 May;**7**:213–224.
  63. Patel MS, Lee J, Baz M, Wells CE, Bloch S, Lewis A, et al. Growth differentiation factor-15 is associated with muscle mass in chronic obstructive pulmonary disease and promotes muscle wasting in vivo. *J Cachexia Sarcopenia Muscle* 2016 Sep;**7**:436–448.
  64. Gonzalez-Freire M, Semba RD, Ubaida-Mohien C, Fabbri E, Scalzo P, Højlund K, et al. The human skeletal muscle proteome project: a reappraisal of the current literature. *J Cachexia Sarcopenia Muscle* 2017 Feb;**8**:5–18.
  65. Neves RX, Rosa-Neto JC, Yamashita AS, Matos-Neto EM, Riccardi DM, Lira FS, et al. White adipose tissue cells and the progression of cachexia: inflammatory pathways. *J Cachexia Sarcopenia Muscle* 2016 May;**7**:193–203.
  66. Konishi M, Ishida J, Springer J, Anker SD, von Haehling S. Cachexia research in Japan: facts and numbers on prevalence, incidence and clinical impact. *J Cachexia Sarcopenia Muscle* 2016 Dec;**7**:515–519.
  67. Sanders KJ, Kneppers AE, van de Boel C, Langen RC, Schols AM. Cachexia in chronic obstructive pulmonary disease: new insights and therapeutic perspective. *J Cachexia Sarcopenia Muscle* 2016 Mar;**7**:5–22.
  68. Sente T, Van Berendoncks AM, Hoymans VY, Vrints CJ. Adiponectin resistance in skeletal muscle: pathophysiological implications in chronic heart failure. *J Cachexia Sarcopenia Muscle* 2016 Jun;**7**:261–274.
  69. von Haehling S, Anker MS, Anker SD. Prevalence and clinical impact of cachexia in chronic illness in Europe, USA, and Japan: facts and numbers update 2016. *J Cachexia Sarcopenia Muscle* 2016 Dec;**7**:507–509.
  70. Giles K, Guan C, Jagoe TR, Mazurak V. Diet composition as a source of variation in experimental animal models of cancer cachexia. *J Cachexia Sarcopenia Muscle* 2016 May;**7**:110–125.
  71. Berger D, Bloechlinger S, von Haehling S, Doehner W, Takala J, Z'Graggen WJ, et al. Dysfunction of respiratory muscles in critically ill patients on the intensive care unit. *J Cachexia Sarcopenia Muscle* 2016 Sep;**7**:403–412.
  72. Amano K, Maeda I, Morita T, Okajima Y, Hama T, Aoyama M, et al. Eating-related distress and need for nutritional support of families of advanced cancer patients: a nationwide survey of bereaved family members. *J Cachexia Sarcopenia Muscle* 2016 Dec;**7**:527–534.
  73. von Haehling S, Morley JE, Coats AJS, Anker SD. Ethical guidelines for publishing in the Journal of Cachexia, Sarcopenia and Muscle: update 2017. *J Cachexia Sarcopenia Muscle* 2017;**8**:1081–1083.



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