

## Second medical opinion in oncological setting.

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## ***Vitae***

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## **Abstract**

Oncological patients increasingly require second medical opinions to feel more likely confident with their oncologists and treatments, although this could lead to wrong opinions and delay in the start of treatments. Second opinions can be required also by physicians to obtain advices, especially in case of rare tumors. The request of new opinions is documented in radiology and pathology settings too, with not negligible discrepancy rate. Conversely, the role in general medical/surgical conditions has not been well established. Literature is poor of studies relative to second opinions or they are more focused on patient's motivations. For these reasons, AIOM (Italian Association of Medical Oncology) and AIOM Foundation faced this topic during the 7<sup>th</sup> Annual Meeting on Ethics in Oncology (Ragusa, 4-5<sup>th</sup> May, 2018). In this position paper we report reasons, limits, advantages and outcomes of second medical opinion and the respective Decalogue in the oncological setting.

**Keywords:** second medical opinions, AIOM, meeting, ethics, decalogue

## **1. INTRODUCTION**

Second medical opinion is a common phenomenon in many health systems, especially in oncological setting [Philip J, 2010; Philip J, 2011], because cancer has a considerable distressing impact on a patient's life, and these patients need to feel especially confident with their oncologists and the prescribed treatments.

More than 50% of patients asked for a second opinion because of diagnosis uncertainty or therapeutic controversy [Hewitt M, 1999; Wagner TH, 1999].

Second medical opinion may also be request by other subjects, as oncologists, general practitioners, professional societies, institutions, or patient advocacy groups [Okamoto S, 2015; Tattersall MH, 2011]. For example, payers (as health insurances) may include second opinion programs to improve efficiency and to reduce medical costs [Rosenberg SN 1989]. Physicians may refer a patient to another colleague to obtain advice or to introduce pathological or radiological standard review [Epstein JI, 1996]. In contrast, patient-initiated second opinions are not part of standard care and are based solely on the patient's initiative.

Proponents are often worried about potential diagnostic mistakes or tricky treatment decisions, and believe that second opinions can make a difference, even in a significant minority of patients [Kedar I, 2003].

Second medical opinion can be considered mandatory in rare cancers, where there is a consensus about the role of expert centres in the diagnosis and the complex multimodality treatment of these tumours [Benson C, 2014]: this clinical situation is not considered in this paper. The value of second medical opinions in radiology and pathology setting is well documented [Allen TC, 2013; Tomaszewski JE, 2000]. The experience and expertise of the pathologists involved, and the type of specimen and cancer reviewed could affect the discrepancy rate in the range of 10%-15% [Renshaw AA, 2007]. Second opinion request could determine the consultation final outcome. Authors showed that the rate of discrepancy of histological examination was greater if the second opinion request came

from the doctor (urologist) rather than from the patient himself [Chan TY, 2005]. In radiology, the discrepancy rate on second readings is thought to be less than 5% for diagnostic studies [Smith PD, 2004] but higher in research setting (from 20% to 40%) [Graber ML, 2013].

Outside of these diagnostic specialties, the impact and potential benefit of second opinions for general medical or surgical conditions has not been rigorously examined and assessed.

From the systems perspective, the behaviour is different among the various national health systems. In fact, on the one hand second opinion could reduce unnecessary procedures, improve the quality of care and lower healthcare costs [Kedar I, 2003; Morris DJ, 2007]; on the other patients may choose wrong opinions or delay the start of a treatment. Moreover, second opinion could have a negative impact on the patient –oncologist relationship [Greenfield G, 2012].

Currently, it is also not clear how second medical opinion could be better formalized to maximize benefits and minimize disadvantages: physicians are key stakeholders in any second medical opinion policies. However, despite a growing interest in patient-centred care and health care quality, the scientific literature in this area is extremely limited and the studies are generally focused on:

- 1- patients' reasons for undergoing second medical opinion and their perspectives [Rippere V, 1995; Wayment RO, 2011; Mellink WA, 2006];
- 2- variations between the first and second medical opinion.

For these reasons and also following the increase in requests for second medical opinion related to the increase of health information through media and internet [Links M, 2009], AIOM (Italian Association of Medical Oncology) and AIOM Foundation discussed this topic during the seventh annual Meeting on Ethics in Oncology, held in Ragusa, 4-5<sup>th</sup> May,

2018. AIOM and AIOM Foundation have developed in these last years a growing interest in ethics to improve awareness of these contents among oncologists and among patients. In this position paper we report reasons, limits, advantages, outcomes of second medical opinion and Decalogue for the second medical opinion in the oncological setting.

## **2. WHY DOES THE PATIENT ASK FOR A SECOND OPINION?**

Multiple factors justify patients to seek a second medical opinion.

From 17% to 68% of the patients, according to different authors [Philip J, 2010; Mellink WA, 2003], ask for second medical opinion to confirm diagnosis or treatment; a quite significant proportion of patients (up to 68%) because hope for some changes in the diagnosis [Mellink WA, 2003]. Nearly half (46%) of cancer patients sought a second medical opinion due to treatment complications [Tam KF, 2005] and a variable proportion, ranging around one-third, had unfulfilled needs and/or negative experiences. Some patients wanted a definitive review because of the perceived severity of the first diagnosis [Philip J, 2010]. Other factors are the desire for further information on the type of disease and/or treatment (including potential complications or adverse effects of therapy) or on drug toxicity or mortality risk and consequently on the cost/benefit ratio.

Dissatisfaction during the first oncological assessment (generally due to communication issues) is further reason for second opinion request.

Therefore, cancer patients wanted additional information about their disease, treatment or prognosis [Tattersal 2009; Mellink WA, 2003]: it is clear that more than one reason can move patients to obtain another opinion on their clinical condition.

The common element for second medical opinion request is concerns about the information received by the oncologist or the physician-patient relationship during the first visit [Tattersall MH, 2009]. Despite efforts to improve physician communication skills, patients continue to perceive deficit [Butler D, 2005] and oncologists continue to

overestimate patient's levels of understanding [Gori S, 2012]. However, this could be partially related to communication modality or to patient perception. Patients could perceive fragments during first consultation, particularly if receiving bad news [Dunn SM, 1993]. Even the most diligent physician could therefore be judged for inadequate information, while patients could subsequently include clinical considerations during the second opinion meeting. Nevertheless, oncologists must remain available to carry out further meetings to better explain the already given information on previously discussed topics, trying to communicate them in a different way.

### **3. THE SOCIOLOGICAL CHARACTERISTICS OF THE “NOMADIC” PATIENTS**

Nomads are defined as patients related for a period to multiple practitioner of the same medical specialty, or different specialties for the same symptomatology.

In a study conducted in Morocco [Boudali A, 2012] among nomadic non-cancer patients seeking several opinions for the same symptoms, researchers administered a questionnaire to 250 patients (150 in rheumatology, 50 in gastroenterology and 50 in neurology). Out 35% of all patients were illiterate, 30% had a primary school education, 22% a secondary school education and 13% a university-level education (13%); 62% were jobless. The global prevalence of nomadism was 51%: 36% in rheumatology, 58% in neurology and 86% in gastroenterology. The medical nomadism was linked with degree of the patients' satisfaction.

Some clinical factors have been evaluated as possible predictive for seeking a second medical opinion. As regards patient's profile, recent literature data seem suggest second opinion more associated to older patients [Czaja R, 2003] and female sex [Mellink WA, 2003], although other authors do not highlight these differences [Mordechai O, 2015; Van De Plas J, 2010].



Additional studies report a higher socio-economic status or residence in peripheral or non-metropolitan areas as predictors for a second opinion. Disease's characteristic such as the site of primary neoplasm (breast cancer) shows a stronger association with second opinion, although it is not well established for disease stage. Among different studies, from 66% to 82% of patients seeking a second opinion were women with an average age of 54 years, above all breast cancer patients [Tattersal 2009; Sutherland LR, 1989], probably due to the high prevalence of breast cancer. Moreover, in China a study conducted on 191 gynaecological cancer patients, late-stage disease radiotherapy and tertiary education were found to be independent predictors for seeking a second opinion in a multivariate analysis from other health-care professionals [Tam KF, 2005]. Finally, according to a study report [Czaja R, 2003], a greater personal involvement in own disease care could make the patient more susceptible to a second opinion as well as participation in online forums and cancer patients telephone services [Attai DJ, 2015].

#### **4. PATIENT - ONCOLOGIST RELATIONSHIPS IN THE SECOND OPINION**

The patient-oncologist relationship should carry inherent elements of trust, loyalty, intimacy and dependency, which belong to the emotional contract between patient and physician. The major predictor for loyalty and mutual commitment to treatment success are trust and satisfaction [Di Matteo MR, 2003; Platonova EA, 2008], and they may even compensate for patient dissatisfaction with other elements of relationship [Platonova EA, 2008].

Second opinion is even more complex, because two or more physicians are involved, resulting in two dyads, but not necessarily a triad [Greenfield G, 2012]. The request of a second medical opinion by the patient may be perceived by the first oncologist as a lack of loyalty and this can make involved subjects uncomfortable. In addition, patients' choice to continue their care with the second opinion consultant can be particularly frustrating for first oncologists [Philip J, 2010]. The second opinion process has been evaluated in

numerous reports. Some authors refer that the second opinion consultant is generally influenced by the opinion of the first colleague and avoids criticizing the previous decision [Philip J, 2010]. Others show that in the vast majority of cases the consultation is carried out in a different medical structure. Furthermore, it has been argued how the perception of the outcome of the second consultation is different for the consultant and the patient himself [Tattersall MH, 2009].

Several unique characteristics of the communication during second medical opinion have been identified: patients expected more personal attention, empathy and respect to their case [Goldman RE, 2009; Rosenberg SN, 1989; van Dalen I, 2001]. In a past report [Rosenberg SN, 1989], the authors observed that patients are inclined to disagree with the second medical opinion when the consultants' explanations are difficult to understand.

Greenfield et al. [Greenfield G, 2012] described the patient-oncologist relationship in second medical opinion from the physicians' perspective. Of note, the reaction of the doctor to the willingness of the patient to hear a second opinion. Most physicians perceive the patient's desire to get a second opinion as legitimate and even expected under certain conditions, and therefore, they do not feel offended; they believe that the second opinion as a positive and legitimate tool when used 'properly', for instance for clinically important reasons, such as obtain more information and reassurance about the diagnosis or treatment. In these cases, the subject directly or indirectly involved in the second opinion could benefit from it, that can validate the first opinion and emotionally prepare the patient for future steps. Moreover, a way to preserve professional power and legitimate the process is the physicians' attitude toward the request for a second opinion.

When legitimate or even suggested, second opinions can be perceived as strengthening and broadening, instead of threatening, the patient-physician relationship.

A common communication problem reported by the physicians is that most patients reveal first opinion only after the second opinion has been given. Or, in some cases, they never

reveal the first opinion. This could be explained with the patients' idea that in this way they can get an objective, uninfluenced opinion and they cannot feel inconvenience and shame about the seeking of second opinions [Greendfield G, 2012].

Therefore, the challenge during a second opinion is to obtain an open, respectful, and empowering communication, which can promote two goals: ratification of a previous opinion while maintaining a healthy relationship with the first oncologist.

## **5. WHAT ADVANTAGES FROM A SECOND OPINION?**

The impact of second medical opinion in the oncology treatment pathway is currently being debated. Second medical opinion may involve potential advantages or disadvantages for patients, physicians, and society. Patients can benefit from a second medical opinion, resulting in improved diagnosis or better treatments, or can benefit psychologically being enabled to act more autonomously and exercise some control and freedom of choice [Axon 2008]. Second medical opinion can also offer reassurance and more certainty for both patients and their physicians. However, second medical opinions sometimes do not yield medical benefits for patients and may only delay the treatment. Moreover, for physicians, second opinions may increase the workload and might be perceived as signalling a patient's lack of trust [Axon A, 2008]. Contrary, it has been argued that second opinions may save costs by preventing unnecessary treatments [Moumjid N, 2007]. Moreover, someone can argue that the massive introduction of worldwide accepted guidelines should reduce the need for seeking a second opinion. Unfortunately, it is important to take into account that guidelines in several situations presents different treatment options or procedure to be done, with possible equivalent outcomes, a part from possible side effects or even the experience and expertise of the oncologist. Again, the guidelines have introduced a more diffuse knowledge among non-healthcare professionals, being often comprehensible even to those whom they are not thought to.

Thus, the real impact of second opinions in oncology is currently unknown and there is no real consensus among the few reported papers. In general, outcome data on second opinion are divergent and scarce and there is no evidence of sure benefits and advantages for patients or physicians [Ruetters D, 2016].

## **6. THE “DECALOGUE” OF THE SECOND MEDICAL OPINION**

In the attempt to define some indications to Italian Oncologists towards second opinions, the Italian Medical Oncology Association (AIOM) and AIOM Foundation discussed this issue during the Annual Meeting on Ethics, in Ragusa in May 2018.

Ten short rules and advices were identified for the Italian Oncologists in order to perform a full of value second opinion.

### ***1- Promoting a second opinion is a right of both the patient and the oncologist***

The patient is free to search the best diagnostic and therapeutic tools for him in other institutions. Besides, it could be a physician need to share with other experts the clinical situation in order to improve treatments. The second opinion consultant could strength the patient-physician relationship. Most of all, in the case of rare disease or complex situation which may benefit from multidisciplinary approach, it is mandatory to refer the patient to the appropriate institution.

### ***2- Talk with your patient/doctor about getting a second opinion***

When a doctor is going to ask for a second opinion for your patient's case or a patient is seeking for a second opinion for his situation, it is better to share this information each other to improve the process and avoid misunderstandings in relationship.

### ***3- Respect the patient's choice to ask for a second medical opinion***

Every involved subject should respect the decision to look for a second medical opinion. The patient-oncologist relationship and communication are complicated. We know that it is not easy to receive “bad news” and it is not manageable to deliver them. This aspect make the first consultation uncomfortable and could induce the patient to ask for a second medical opinion. However, if this decision is clearly shared, it does not break the patient-oncologist relationship.

On the other hand, every patient should respect the oncologist possible decision to seek a second opinion aiming to improve treatment outcome

#### ***4- Help your patient***

Since second opinion process is increasing trough, also thanks to internet, it could be significant that Oncologists address the patient seeking for a second opinion to tertiary or recognized expert centre, in the attempt that the second opinion is qualitatively appropriate.

#### ***5- Give complete and clear information to the patient***

Oncologist should consider and discuss with patients all therapeutic choices in a clear and complete way. For instance, even treatments not performed in the physician’s hospital but available in clinical trials should be properly discussed and clearly presented. Most of all, the physician should present all available and possible therapies according to patient disease stage and clinical condition.

#### ***6- Do not be self-referential***

Oncologist should be consistent with international and national Guidelines and scientific evidence. During the second opinion meeting, the oncologist should avoid to discuss on therapeutic options not supported by robust clinical trials outcomes.

#### ***7- Be clear and honest with the patient***

If the oncologist has no experience in a specific situation or believes that a shared case discussion should improve the outcome, patient should be referred to another colleague or centre, as appropriate. This is particularly suitable for rare cancers, for which a multidisciplinary approach is nowadays mandatory.

### ***8- Examine the patient***

A second opinion must be done at the presence of the patient and must include physical examination. Online second opinion (except for pathological and radiological review) is at risk to be inappropriate with respect of the clinical situation of the patient.

### ***9- Give feedback to reference oncologist or general practitioner***

A complete visit report should be, directly and/or through the patient, addressed to reference oncologist who will cure the patient.

If desired by the patient, a visit report could be addressed to his general practitioner.

### ***10- Welcome the result of the second medical opinion***

First oncologist should accept second opinion consultation should discuss results with the patient. Oncologist should clarify whether it is possible to follow the indications of the second medical opinion or if there are disagreements with these indications. In the latest, oncologist should illustrate any different clinical indications.

## **7. CONCLUSIONS**

Second medical opinion is an important step and an opportunity for oncological patients and also for the oncologists, in particular cases.

AIOM and AIOM Foundation suggest this Decalogue in order to keep a proper relationship between patients and oncologists and to respect the ethic values that are the base of Hippocratic Oath.

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## REFERENCES

- ✓ Allen TC. Second opinions: pathologists' preventive medicine. *Arch Pathol Lab Med.* 2013;137(3):310-1. DOI:10.5858/arpa.2012-0512-ED
- ✓ Attai DJ, Cowher MS, Al-Hamadani M Schoger JM, Staley AC, Landercasper J. Twitter social media is an effective tool for breast cancer patient education and support: Patient reported outcomes by survey. *J Med Internet Res* 2015;17:e188 DOI:10.2196/jmir.4721
- ✓ Axon A, Hassan M, Niv Y, Beglinger C, Rokkas T. Ethical and legal implications in seeking and providing a second medical opinion. *Dig Dis.* 2008;26(1):11-7. DOI: 10.1159/000109379
- ✓ Benson C, Judson I. Role of expert centres in the management of sarcomas--a UK perspective. *Eur J Cancer.* 2014 Jul;50(11):1951 DOI:10.1016/j.ejca.2014.04.006
- ✓ Boudali A, Bahiri R, Hmamouchi I, Abouqal R, Hajjaj Hassouni N. The prevalence of medical nomadism of the followed patients in rheumatology. *Rheumatol Int.* 2012;32(6):1639-43. DOI:10.1007/s00296-011-1823-0
- ✓ Butler D. Waiting lists. What are we doing right? *Br J Perioper Nurs.* 2005;15(12):537-43. DOI:10.1177/175045890501501205

- ✓ Chan TY, Epstein JI. Patient and urologist driven second opinion of prostate needle biopsies. *J Urol* 2005; 174:1390–1394; discussion 1394; author reply 1394. DOI:10.1097/01.ju.0000173633.56174.c4
- ✓ Czaja R, Manfredi C, Price J. The determinants and consequences of information seeking among cancer patients. *J Health Commun* 2003;8:529–562; DOI:10.1080/716100418
- ✓ Di Matteo MR. Future directions in research on consumer-provider communication and adherence to cancer prevention and treatment. *Patient Education and Counseling* 2003, 50(1), 23e26. DOI:10.1016/s0738-3991(03)00075-2
- ✓ Dunn SM, Butow PN, Tattersall MH, Jones QJ, Sheldon JS, Taylor JJ, Sumich MD. General information tapes inhibit recall of the cancer consultation. *J Clin Oncol*. 1993;11(11):2279-85. DOI:10.1200/JCO.1993.11.11.2279
- ✓ Epstein JI, Walsh PC, Sanfilippo F. Clinical and cost impact of second-opinion pathology. Review of prostate biopsies prior to radical prostatectomy. *Am J Surg Pathol*. 1996;20(7):851-7. DOI:10.1097/00000478-199607000-00008
- ✓ Goldman RE, Sullivan A, Back AL, Alexander SC, Matsuyama RK, Lee SJ. Patients' reflections on communication in the second-opinion hematology-oncology consultation. *Patient Educ Couns* 2009;76:44–50. DOI:10.1016/j.pec.2008.11.016
- ✓ Gori S, Greco MT, Catania C, Colombo C, Apolone G, Zagonel V; AIOM Group for the Informed Consent in Medical Oncology. A new informed consent form model for cancer patients: preliminary results of a prospective study by the Italian Association of Medical Oncology (AIOM). *Patient Educ Couns* 2012; 87:243-9. DOI:10.1016/j.pec.2011.08.008



- ✓ Graber ML. The incidence of diagnostic error in medicine. *BMJ Qual Saf.* 2013;22(suppl 2):ii21-ii27. DOI:10.1136/bmjqs-2012-001615
- ✓ Greenfield G, Pliskin JS, Feder-Bubis P, Wientroub S, Davidovitch N. Patient-physician relationships in second opinion encounters - the physicians' perspective. *Soc Sci Med.* 2012;75(7):1202-12. DOI:10.1016/j.socscimed.2012.05.026
- ✓ Hewitt M, Breen N, Devesa S. Cancer prevalence and survivorship issues: analyses of the 1992 National Health Interview Survey. *J Natl Cancer Inst.* 1999;91(17):1480-6. DOI:10.1093/jnci/91.17.1480
- ✓ Kedar I, Ternullo JL, Weinrib CE, Kelleher KM, Brandling-Bennett H, Kvedar JC. Internet based consultations to transfer knowledge for patients requiring specialised care: retrospective case review. *BMJ.* 2003;326(7391):696-9. DOI: 10.1136/bmj.326.7391.696
- ✓ Links M, Aghmesheh M. Second opinions: agendas and ego. *Acta Oncol.* 2009;48(8):1210-3. DOI:10.3109/02841860902896105
- ✓ Mellink WA, Dulmen AM, Wiggers T, Spreeuwenberg PM, Eggermont AM, Bensing JM. Cancer patients seeking a second surgical opinion: results of a study on motives, needs, and expectations. *J Clin Oncol.* 2003;21(8):1492-1497. DOI: 10.1200/JCO.2003.12.058
- ✓ Mellink WA, Henzen-Logmans SC, Bongaerts AH, Ooijen BV, Rodenburg CJ, Wiggers TH. Discrepancy between second and first opinion in surgical oncological patients. *Eur J Surg Oncol.* 2006 ;32(1):108-12. DOI:10.1016/j.ejso.2005.08.007
- ✓ Mellink WA, Dulmen AM, Wiggers T, Spreeuwenberg PM, Eggermont AM, Bensing JM. Cancer patients seeking a second surgical opinion: Results of a

study on motives, needs, and expectations. *J Clin Oncol* 2003;21: 1492–1497.  
DOI:10.1200/JCO.2003.12.058

- ✓ Mordechai O, Tamir S, Weyl-Ben-Arush M. Seeking a second opinion in pediatric oncology. *Pediatr Hematol Oncol* 2015;32:284–289. DOI: 10.3109/08880018.2014.987938
- ✓ Morris DJ. In response to “oncologists and medical malpractice”. *J Oncol Pract* 2007;3:51–2. DOI:10.1200/JOP.0719002
- ✓ Moumjid N, Gafni A, Bremond A, Carrere MO. Seeking a second opinion: do patients need a second opinion when practice guidelines exist? *Health Policy*. 2007 ;80(1):43-50. DOI:10.1016/j.healthpol.2006.02.009
- ✓ Okamoto S, Kawahara K, Okawa A, Tanaka Y. Values and risks of second opinion in Japan's universal health-care system. *Health Expect*. 2015;18(5):826-38. DOI:10.1111/hex.12055
- ✓ Philip J, Gold M, Schwarz M, Komesaroff P. Second medical opinions: The views of oncology patients and their physicians. *Support Care Cancer* 2010;18: 1199–1205. DOI:10.1007/s00520-009-0742-z
- ✓ Philip J, Gold M, Schwarz M, Komesaroff P. An exploration of the dynamics and influences upon second medical opinion consultations in cancer care. *Asia Pac J Clin Oncol*. 2011;7(1):41-6. DOI:10.1111/j.1743-7563.2010.01330.x
- ✓ Philip J, Gold M, Schwarz M, Komesaroff P. Second medical opinions: the views of oncology patients and their physicians. *Support Care Cancer*. 2010;18(9):1199-205. DOI:10.1007/s00520-009-0742-z
- ✓ Platonova EA, Kennedy KN, Shewchuk RM. Understanding patient satisfaction, trust, and loyalty to primary care physicians. *Med Care Res Rev*. 2008;65(6):696-712 DOI:10.1177/1077558708322863

- ✓ Renshaw AA. Reporting risk of malignancy/dysplasia in cytology: a potential way to improve communication, if not reputation. *Cancer*. 2007;111(6):465-6. DOI:10.1002/cncr.23123
- ✓ Rippere V. Are second opinions a right or a concession? An important political issue. *BMJ* 1995;311(7018):1506. DOI:10.1136/bmj.311.7018.1506b
- ✓ Rosenberg SN, Gorman SA, Snitzer S, Herbst EV, Lynne D. Patients' reactions and physician-patient communication in a mandatory surgical second-opinion program. *Med Care* 1989;27:466–477. DOI:10.1097/00005650-198905000-00003
- ✓ Ruetters D, Keinki C, Schroth S, Liebl P, Huebner J. Is there evidence for a better health care for cancer patients after a second opinion? A systematic review. *Cancer Res Clin Oncol* 2016 ;142(7):1521-8. DOI:10.1007/s00432-015-2099-7
- ✓ Smith PD, Temte J, Beasley JW, Mundt M. Radiographs in the office: is a second reading always needed? *J Am Board Fam Pract*. 2004;17(4):256-63. DOI: 10.3122/jabfm.17.4.256
- ✓ Sutherland LR, Verhoef MJ. Patients who seek a second opinion: are they different from the typical referral? *J Clin Gastroenterol*. 1989 ;11(3):308-13. DOI:10.1097/00004836-198906000-00013
- ✓ Tam KF, Cheng DK, Ng TY, Ngan HY. The behaviors of seeking a second opinion from other health-care professionals and the utilization of complementary and alternative medicine in gynecologic cancer patients. *Support Care Cancer*. 2005;13(9):679-84. DOI:10.1007/s00520-005-0841-4
- ✓ Tattersall MH, Dear RF, Jansen J, Shepherd HL, Devine RJ, Horvath LG, Boyer ML. Second opinions in oncology: the experiences of patients attending the

Sydney Cancer Centre. *Med J Aust.* 2009;191(4):209-12.  
<https://doi.org/10.5694/j.1326-5377.2009.tb02754.x>

- ✓ Tattersall MH. Can a second medical opinion in a patient with cancer be truly independent? *Asia Pac J Clin Oncol.* 2011;7(1):1-3. DOI:10.1111/j.1743-7563.2010.01368.x
- ✓ Tomaszewski JE, Bear HD, Connally JA, Epstein JI, Feldman M, Foucar K, Layfield L, LiVolsi V, Sirota RL, Stoler MH, Stomblor RE. Consensus conference on second opinions in diagnostic anatomic pathology. Who, What, and When. *Am J Clin Pathol.* 2000;114(3):329-35. DOI:10.1093/ajcp/114.3.329
- ✓ van Dalen I, Groothoff J, Stewart R, Spreeuwenberg P, Groenewegen P, van Horn J. Motives for seeking a second opinion in orthopaedic surgery. *J Health Serv Res Policy* 2001;6:195–201. DOI:10.1258/1355819011927486
- ✓ Van De Plas J, Buntinx F, De Vadder I, Dhollander DI. Cancer patients looking for a second opinion. [dutch]. *Tijdschrift voor Geneeskunde* 2010; 66(16):770–774 DOI: 10.2143/TVG.66.16.2000807
- ✓ Wagner TH, Wagner LS. Who gets second opinions? *Health Aff (Millwood).* 1999;18(5):137-45. DOI:10.1377/hlthaff.18.5.137
- ✓ Wayment RO, Bourne A, Kay P, Tarter TH. Second opinion pathology in tertiary care of patients with urologic malignancies. *Urol Oncol.* 2011;29(2):194-8. DOI:10.1016/j.urolonc.2009.03.025