MSD AstraZeneca

CECOG
Central European Cooperative Oncology Group

A Guide To Genetic Consenting

Module 5:
The importance of mainstream consenting

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Learning objectives

The primary purpose of this learning module is to inform and educate non-genetics HCPs on genetic consenting.

This module will enable HCPs to:

- Be aware of alternative models of genetic consenting, including mainstream consenting
- Understand how genetic testing can guide treatment decisions in cancer

HCP=healthcare professional

What is mainstream genetic consenting vs. traditional genetic consenting?

- The traditional cancer-related model of genetic counselling has been practiced in a face-to-face meeting, with patients travelling to a health-care facility to meet with a genetics clinician or counsellor[1,2]

- Mainstream genetic consenting is performed through the non-genetics team (e.g. oncologist, surgeon, CNS), who undergo specialised training and/or certification in the genetic consenting process as part of their existing appointments, with support as required from a genetics service[1]

CNS=Clinical nurse specialist

1. Rahman N. *Clin Med.* 2014; 14:436-439; 2. Scheinberg, et al. *Asia-Pac J Clin Oncology*. 2021;17:163-177. https://doi.org/ 10.1111/ajco.13334

Advantages of mainstream consenting vs. traditional genetic consenting

Improvement in turnaround times for genetic test results

Facilitates increased access to genetic tests

Creates closer collaboration between geneticists and non-genetics HCPs

HCP=healthcare professional

Bokkers K, et al. *Cancers.* 2022;14:1059

The oncogenetic model utilises members of multidisciplinary teams in oncology clinics to provide pre-test counselling and genetic testing

The oncogenetic or multidisciplinary model relies on members of the MDT, other than the primary physician, to provide pre-test genetic counselling and obtain genetic consent for genetic testing

Pre-test genetic counselling can be provided by any member of the MDT including oncologists, surgeons and specialist nurses, who can subsequently obtain informed consent from patients[1–3]

- Members of the MDT receive training on how to discuss the role of BRCA testing with patients and on genetic counselling techniques[1–3]

Patients with positive genetic results are referred to a genetic counsellor for post genetic counselling[4]

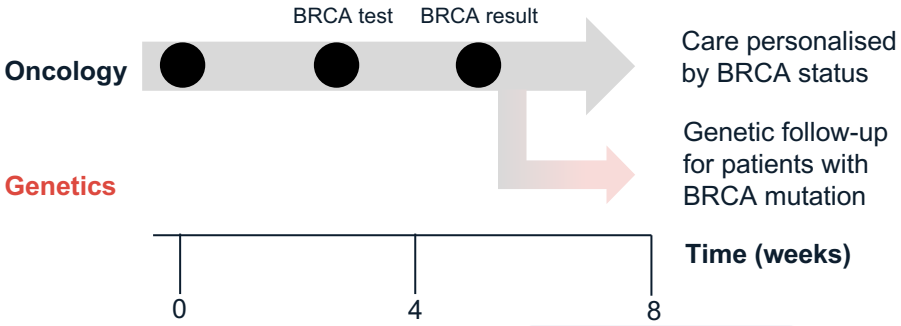
MDT=multidisciplinary team

1. Personal opinion, Christian Singer; 2. Colombo N, et al. *J Clin Oncol*. 2018;36:1300–1307; 3. Hallowell N, et al. *Fam Cancer*. 2019;18:293–301; 4. Grindedal EM, et al. *Fam Cancer*. 2020;19:133–142.

Mainstream genetic consenting is an effective, efficient and patient-centred pathway that could increase the number of patients being consented for BRCA tests in ovarian cancer

207 patients with ovarian cancer were offered BRCA testing through a mainstream genetic testing pathway

Mainstream BRCA testing pathway for patients with ovarian cancer



~13-fold reduction in required genetics appointments

~4-fold reduction in time to BRCA test result[b]

97% of patients felt that written information was clear and helpful

98% of patients felt they had enough time to consider being tested[a]

96% of patients understood that test results could have implications for themselves

98% of patients understood that test results could have implications for their family

88% of patients understood that additional genetic discussions would be organized if results were positive

100% of patients were happy to have been tested

[a]Patient consent can be obtained anytime between testing discussions and BRCA testing
[b]Compared with traditional BRCA testing pathways for patients with ovarian cancer

George A, et al. *Sci Rep.* 2016;6:29506

How can genetic testing guide treatment decisions?

National guidelines recommend that eligible patients with breast and ovarian cancer receive genetic testing for heritable *BRCA1* and *BRCA2* mutations in order to guide treatment decisions[1]

- For example, patients with high-grade serous ovarian cancer found to have a *BRCA1* or *BRCA2* gene mutation may be offered additional lines of platinum-based therapy and may be eligible for targeted therapy[2]

1. eviQ website. *BRCA1* and *BRCA2* testing. Available at: https://www.eviq.org.au/cancer-genetics/adult/genetic-testing-for-heritable-pathogenic-variants/620-brca1-and-brca2-genetic-testing (last accessed July 2022); 2. Percival N, et al. *Br J Nurs.* 2016;25(12):690-694

The ENGAGE survey-based study demonstrated that oncologist-led BRCA testing could improve the management of patients with ovarian cancer[1]

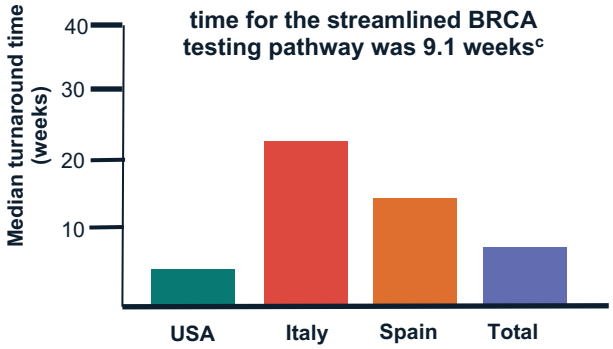
634
patients with ovarian cancer[a]

26
sites in the USA, Italy and Spain[b]

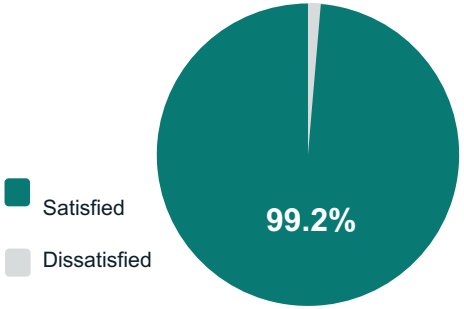
Primary outcomes:

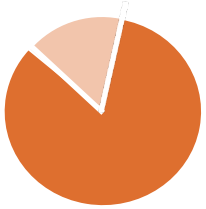
- Turnaround time from pre-test counselling to test result or post-test counselling
- Patient assessment of pre-test counselling quality and satisfaction with the streamlined BRCA testing pathway
- Oncologist (or oncology nurse) and geneticist or genetic counsellor satisfaction with the streamlined BRCA testing pathway

The median overall turnaround time for the streamlined BRCA testing pathway was 9.1 weeks[c]

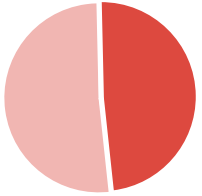


Patients were highly satisfied with the oncologist-led BRCA testing pathway





84.3%
of **oncologists** agreed or strongly agreed that the oncologist-led process for BRCA testing worked well



48.1%
of **geneticists or genetic counsellors** welcomed having oncologists perform pre-test counselling

[a]710 patients were enrolled. Ten patients were excluded as they did not fully comply with the inclusion criteria; 634 patients completed the study. Reasons for discontinuation were death (n=24), loss to follow-up (n=19), voluntary discontinuation (n=14) and other reasons (n=9)

[b]USA(n=11); Italy (n=8); Spain (n=7)

[c]The longest delays, particularly for Italy, occurred between blood sample collection and receipt of test results by the referring clinician or provision of test results to the patient by the testing library, oncology, or genetic counsellor

1. Colombo N, et al. *J Clin Oncol.* 2018;36:1300–1307

Summary

- Mainstream genetic consenting is performed through the non-genetics team (e.g. oncologist, surgeon, CNS), who undergo specialised training and/or certification in the genetic consenting process as part of their existing appointments, with support as required from a genetics service[1]

- The oncogenetic or multidisciplinary model relies on members of the MDT, other than the primary physician, to provide pre-test genetic counselling and obtain genetic consent for genetic testing[2]

- Mainstream genetic consenting is an effective, efficient and patient-centred pathway that could increase the number of patients being consented for BRCA tests in ovarian cancer[3]

CNS=Clinical nurse specialist; MDT=multidisciplinary team

1. Rahman N. *Clin Med*. 2014; 14:436-439; 2. Colombo N, et al. *J Clin Oncol*. 2018;36:1300–1307; 3. George A, et al. *Sci Rep*. 2016;6:29506.