Poster session – 5

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Unveiling Priority Challenges in the Healthcare System for Ovarian Cancer – Advancement and Plausible Solutions

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BACKGROUND

- Ovarian Cancer (OC) is a deadly disease with high mortality-to-incidence ratio (>0.6)[1]
- Median age at diagnosis with OC is 63 years [2] and majorly (~75%) diagnosed at an advanced stage, where cancer has spread beyond the ovary[1,2]
- 1 in 6 women die within the first 90 days of diagnosis, reflecting the potential high morbidity and mortality caused by presentation with advanced stage disease[1]
- The relative 5-year survival rate of advanced stage OC is 31.5% in the US, much lower than other gynecological cancers[2]
- OC has high mortality, low survival, and poor prognosis owing to numerous healthcare system (HCS) challenges

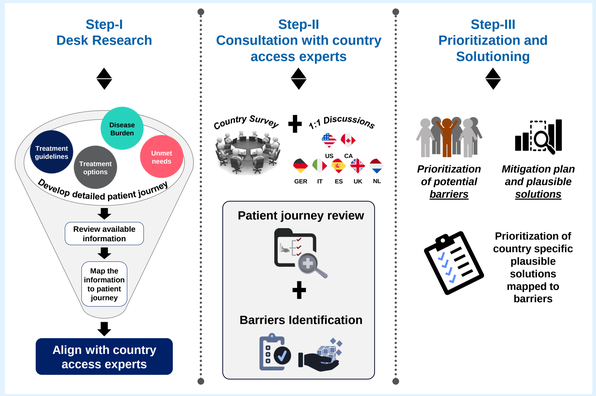
OBJECTIVE

- This study aims to highlight key challenges encountered by patients and healthcare professionals (HCPs) across the OC patient journey and offer potential solutions by drawing parallels between the US, Canada, and key European countries

METHODOLOGY

- In this study, 3-step approach has been utilized with judicious mix of integrative desk research and inputs from country access experts. This involved:
  - conducting desk research to build the OC patient journey,
  - consulting with country access experts (the US, Canada, and key European countries) to identify potential barriers and solutions, and
  - finally prioritizing country specific activities based on their valuable inputs
- The study focused on the US, Canada, and key European countries due to their importance as essential markets for pharma industry and their representation of various payer archetypes

Figure 1. Methodology of study involving 3-step approach



RESULTS

Potential barriers of OC

- Late diagnosis is one of the key challenges owing to lack of awareness among women on OC symptoms
- Time from OC symptoms to clinical diagnosis is high in the US and Canada (35 to 36 weeks) and it varied widely in major European countries (Germany-21 weeks, UK-30 weeks, Italy-31 weeks)[3]
- More than half of women in the US, Canada (59.3%), Germany (79.3%), and Italy (56.5%) know little or nothing about OC[3]
- Differences with reaching the optimal outcomes may be observed in certain cases, when surgeries are not performed by the gynecologic oncologists. In Netherlands, in the absence of gynecologic oncologist, only 49.5% of OC patients received treatment as per protocol and only 32.1% of OC patients were performed with adequate surgical staging[4]
- Screening challenges are caused due to current low predictive value screening procedures (CA125, transvaginal ultrasound). In the UK, NHS did not introduce a national screening program based on the results of a large trial “UKCTOCS (UK Collaborative Trial of Ovarian Cancer Screening)”[5]
- Across countries, almost 90% of the women have never undergone a test for BRCA1/ 2 gene defects prior to their diagnosis. Despite having cases of OC in close family relatives, testing prior to diagnosis was being conducted only for one in five women[3]
- Insufficient reimbursement for targeted therapies and biomarker testing, treatment challenges faced by oncologists and limited access to newer treatment options add to the list of barriers

Figure 2. Potential barriers of OC

Late diagnosis

Limited awareness among patients on identification of symptoms; often unspecific, ignored and mistaken as GI symptoms

Misdiagnosis by general practitioner due to lack of education on differentiation of OC symptoms vs other gastrointestinal disorders such as irritable bowel syndrome

Delay in referral to specialist by general physician as the symptoms may be misdiagnosed

Referral challenges

Lack of integrated care and multidisciplinary team approach due to fragmented and siloed care across hospital departments

Surgery and treatment: Sometimes surgeries are not performed by gynecologic oncologists leading to differences in outcomes

Screening/Testing challenges

Lack of effective tumor markers: Elevated CA 125 levels, key tumor marker in screening, is only 50% accurate in early stage-I cancers

Low predictive value screening procedures: Current screening/ diagnosing methods used are outdated and have low predictive value for normal risk women

Routine screening not performed regularly for women at an average/ high risk due to issues in capability, time

Testing challenges: BRCA testing for germline/ somatic mutations is low due to lack of genetic counselling and long turn around time for test results

Treatment planning challenges

Lack of definition on platinum resistance: Platinum resistance definition varies; standard is considered as disease relapse within 6-12 months of platinum treatment (irrespective of line of therapy)

Challenges in maintenance Tx: Relatively low maintenance treatment rate for ovarian cancer patients (clinical awareness challenges)

Treatment sequencing: Reimbursement guidelines; Lack of effective treatment options for platinum resistant/refractory patients

Others

Payer preferences and reimbursement challenges: Biomarker tests insufficiently reimbursed; Very limited or non-homogeneous reimbursement of targeted therapies in few countries or across regions in same country

Prioritization of barriers across countries

- Late diagnosis and genetic testing challenges were highly prioritized barriers across all countries in the study
- Other identified barriers had different priorities among countries. Screening challenge was one of the high priority barriers in the US, however it was not of priority in Italy where lack of definition on platinum resistance is the top barrier
- When comparing Canada to the US and other European countries, challenges associated with payer preferences and reimbursement were recognized as significant barriers of high priority
- Below is a comparison of identified barriers and their priorities in different countries:

Figure 3. Prioritization matrix (the US vs Canada, Germany, and Italy)

		US	CA	GER	IT
Late diagnosis	Limited awareness	●	●	●	●
	Misdiagnosis	●	●	◐	○
	Delay in referral to specialist	◐	●	◐	●
Referral challenges	Lack of integrated care	◐	◐	●	◐
	Surgery and treatment	◐	◐	●	◐
Screening/Testing challenges	Lack of effective tumor markers	●	◐	◐	○
	Low predictive value screening procedures	●	◐	◐	○
	Routine screening not performed regularly	●	◐	◐	○
	Testing challenges	●	●	●	●
Treatment planning challenges	Lack of definition on platinum resistance	◐	◐	◐	●
	Treatment sequencing	◐	◐	◐	◐
	Challenges in maintenance treatment	◐	○	◐	○
Others	Payer preferences and reimbursement challenges	◐	●	◐	◐

● *High priority* ◐ *Medium priority* ◐ *Low priority* ○ *No priority*

Way forward

- Country specific plausible solutions that can be implemented to help overcome the barriers and might result in improved OC patient journey in health care system were identified as follows:

Figure 4. Plausible solutions to overcome potential OC barriers

Limited awareness	Surgery and treatment	Screening/Testing challenges	Others
Adopt multichannel strategies to improve medical education and raise OC disease awareness and symptoms among patients	Support national guidelines stating referral to a tertiary center or specialist gynaecologic oncologist as the standard for treatment	Partnership with universities/ research centers to develop and support early OC diagnostics, effective tumor markers, screening process	Ensure payers recognize the unmet need in OC through real world evidence data to achieve optimum access to targeted therapies
Collaborate with patient support groups to increase education on OC among women	Improve access to OC specialists - gynecologic oncologists for treatment and surgery	Focus on educating patients regarding BRCA/HRD testing (such as patient accessible materials)	Provide psychological support to patients and caregiver

- The above findings are based on preliminary data and may necessitate further research in the OC space

References

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Conflict of interest

Narin Yasar, Murat Akdere, Srilakshmi Daruri, Roopesh Kumar and Neha Aggarwal are employees of Novartis