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Review

Psychosocial aspects and life project disruption in young women diagnosed with metastatic hormone-sensitive HER2-negative breast cancer

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ABSTRACT

Metastatic breast cancer (MBC) diagnosis in young women negatively impacts on quality of life (QoL) and daily activities, disrupting their life project and forcing them to face new psychosocial challenges. The recently published results on the improvement of the overall survival of pre- or perimenopausal women with hormone-receptor-positive, HER2-negative MBC treated with CDK4/6 inhibitors plus endocrine therapy, while preserving, and in some items improving their QoL, will change the landscape of the management of this patient population. Their extended survival and potential improvement in QoL will, therefore, modify their specific needs in terms of psychosocial support.

The complexity of the care of young women with MBC is described herein, based on an extensive literature review. Further research about the specific psychosocial requirements of these women and a new multidisciplinary holistic approach is paramount to properly address their concerns and preferences. The communication with and support of their partners, parents and children is an important factor affecting the QoL of these patients. Altogether, a multidisciplinary care, open communication and personalized support is required to address the psychosocial implications of the new prognostic expectations on these patients with the incorporation of new targeted therapies.

Contents

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Introduction

Breast cancer (BC) is the most common cancer in women, with approx. 2 million new cases diagnosed, estimated 0.6 million deaths and a 5-year prevalence of 6.8 million people worldwide in 2018 [1]. With 2 million patients, BC is the most prevalent cancer among the European population [2]. Among the European adolescents and young women, the incidence of BC increased by about 1.2% per year between 1990 and 2008, the most pronounced increases being observed in women under 35 [3]. Within the newly diagnosed BC cases worldwide, approx. 5–10% are metastatic [4], which may however be up to 20–30% in low- and middle-income countries. Moreover, approx. 20–30% of the early breast tumors progress to metastatic disease after initial treatment [4].

The Surveillance, Epidemiology, and End Results (SEER) registry collected information on the incidence of BC subtypes based on immunohistochemistry of approx. 28% of the US population [5]. Within women younger than 50 years, 64.8% had hormone-receptor (HR)-positive/HER2-negative cancers. Subtype distribution varied by age, with a higher proportion of more aggressive ones found among younger women [5]. Data of several other studies also suggest that tumors in younger women tend to be of more aggressive phenotypes [6] with a higher ratio of Luminal B-type cancers *versus* Luminal A-type cancers and higher proportions of Triple-negative cancers compared to the general proportion of women with BC [7].

Between 1995 and 2013, the median survival for metastatic breast cancer (MBC) was approx. 2–3 years in developed countries [4]. With the recent introduction of new targeted therapies, the overall survival (OS) and, thus, the prevalence of young women with luminal MBC is expected to increase in the next years. The 3rd International Consensus Conference for Breast Cancer in Young Women (BCY3), organized by the European School of Oncology (ESO) and the European Society for Medical Oncology (ESMO), remarked the under-representation of young women ($\leq$40 years of age) in research programs [6]. Further investigation and intervention studies are therefore required to improve the health outcomes of these patients.

While national health technology assessment guidelines within the European Union recognize the relevance of quality of life (QoL) to determine the relative effectiveness of new therapies, it is still a factor poorly reflected during the actual assessment [8]. This is mainly due to methodological concerns relating to the collection and quality of these QoL data. Using patient-centered outcomes in reimbursement decisions will thus ultimately require tools appropriately measuring the impact of new drugs on QoL and psychosocial aspects.

Coping with the diagnosis of MBC in young women

Communication of the metastatic stage and its prognosis to the patients is a challenge both for patients and physicians [9]. The *Breast Cancer Center Survey*, directed to health care professionals (physicians, nurses and leaders), unveiled a demand for realistic and comprehensive information and an open dialogue with patients, particularly considering frequent patient misconceptions about mortality, pain, treatment, and survival. Physicians tend to downplay the severity of metastatic disease in their communication with patients [4], most health care professionals identifying training in the communication of “bad news” to patients and families as a key need [4]. In the MBC setting, communicating what the patient expects with regard to the benefit of treatment, may be useful for both the physician and the patient [9]. The communication between the healthcare professionals and the patient must be tailored, as approximately 83% of the patients wish to have as much information as possible about their disease, while 16% only wish to receive limited information [9]. One of the factors reported by MBC patients to contribute to their QoL and sense of empowerment was knowledge of available therapies and their clinical benefits [4]. Thus, facilitating access of MBC patients to accurate and reliable information is fundamental.

The creation of a favorable communication environment during the clinical encounter is critical for patients to voice their concerns and preferences in order to tailor their care and treatment [4,10]. Shared decision making (SDM) between a patient and one or more health care professionals is defined as an exchange in which information giving and deliberation is interactional, the parties work together towards reaching an agreement on the treatment, and all members have an investment in the decision made [10]. In advanced cancer care, SDM is an important element, patients with BC particularly wishing to be actively involved in it [11]. A recent meta-analysis has assessed available tools to support patients with MBC in SDM, of which only two tools have been positively evaluated on their effectiveness [11]. One of these tools is a decision aid for BC patients (not specific for MBC) on first to fourth line of chemotherapy, while the second consists of a video-recording and booklet describing the experience of four women living with MBC. The fact that these tools were only tested in pilot studies and require validation before implementation further highlights the unmet need of such decision aids. Moreover, specific instruments to support SDM with young women diagnosed of MBC, considering their differential needs, should be developed.

The diagnosis of an uncurable disease such as MBC puts women under special distress. Despite the increasing prevalence of MBC in young women, limited research has evaluated their psychological distress at diagnosis. A recent study has revealed anxiety as the most clinically prevalent psychological problem in young women with *de novo* MBC [12]. The prevalence of clinically significant anxiety and depression symptom burden in this population was 44% and 20%, respectively, exceeding rates observed in mixed-age populations [12]. These young women may be particularly vulnerable to distress given the unique psychosocial stressors, such as disruptions in their expected life roles and responsibilities. Indeed, younger age has been associated with worse psychological adjustment [13].

Psychological treatments focused on how the patient copes with the diagnosis could influence the evolution of the disease [14]. As shown by a meta-analysis, the way a patient faces her BC diagnosis

may influence her psychological well-being [15]. Engagement forms of coping, aiming to eliminate, reduce, or manage stressors or their emotional consequences, were found to be related to better psychological and physical states than disengagement forms of handling the diagnosis aiming to avoid, ignore, or withdraw from stressors or their emotional consequences. Disengagement seems to be more maladaptive for women under BC treatment. Moreover, in line with other studies, rumination was shown to be associated with depressive symptoms, negative affect, poor problem-solving and increased stress-related problems [15]. Taken together, use of coping targeting adjustment and avoiding use of disengagement forms of coping were related to better psychological well-being and physical health and, thus, particularly beneficial for BC patients undergoing treatment [15].

Women with advanced breast cancer (ABC) who experienced persistent anxiety and depression, have been described to be pessimists, to have greater negative cancer-related rumination, greater unmet psychological supportive care needs, and greater physical symptoms distress [16]. These findings unveil the need of preventive interventions focusing on the reduction of rumination and provision of emotional support. The patients' requirement of help to avoid or manage symptom rumination should be assessed in a regular manner [16].

As recognized by the *BCY3 Consensus Conference*, young women with MBC have unique medical and psychosocial concerns that need to be considered and addressed, specific and multidisciplinary care being paramount [6]. Being at a higher risk for psychosocial distress, their need for psychosocial support should be regularly assessed [6]. According to international consensus and psychosocial care guidelines, psycho-oncological support and treatment should be provided early when required, highlighting the importance of a well-coordinated multidisciplinary team [17]. Innovative and structured communication and supportive tools (e.g., online programs, web-based interventions) should be developed and scientifically validated [6]. Moreover, the access of support to child care is important, as it has been reported by MBC patients as one of the factors contributing to their QoL [4].

Impact of MBC diagnosis on the family of young women

A diagnosis of BC in young women is distressing and overwhelming for both the patient and her family, impacting their communication, sexuality, role distribution and psychological well-being. A study run in Australia, examined the role of the family when supporting the younger women (<50 years) after a diagnosis of BC, recognizing the complexity of changing roles experienced by family members [18]. The study identified that the family acted as a 'buffer from society' in providing emotional and practical support. Open communication of needs and role changes acceptance were important to avoid disappointment and emotional distress. Consistent with the social-cognitive processing theory, open communication with family members has been associated with better psychological adjustment among MBC patients [19]. Families may demonstrate a range of strengths but are also vulnerable during this stressful experience. The aggressive multimodal treatments likely to be required by younger women, pose physical and psychological consequences for both the patient and her supporting family. For this reason, health professionals need to be aware of the possible psychological support demands of families, which are often neglected [18].

Deciding on how much to tell their children about the diagnosis, is particularly stressful to patients with BC [20–22]. Parents may be unsure of how much can be understood or coped with by their children and have difficulties in deciding the right balance between telling the truth and protecting them. Despite wanting to communicate with their parents with advanced cancer, children were concerned to upset them with asking questions [23]. Several studies and systematic reviews have concluded the benefit of an open communication with children of parents with terminal illness [24]. Women with ABC diagnosis interviewed within a study, felt they could not cope with their children's' feelings sufficiently well, wanting specialized support for their children [24]. Psychological support needs indeed to be offered to families and specifically to children, since depressive and anxiety symptoms can occur in children having a parent with terminal illness [25]. This support may be more beneficial if offered preventively, rather than reactively [24]. Altogether, this suggests that MBC patients might benefit from guidance on how to have an open communication with their children and that psychological support for their children must be considered.

Women with MBC quite often hide the seriousness of their health situation to parents and friends. Patients want to avoid their parents the painful idea of losing a child, a situation 'contra natura' difficult to cope with [26]. Mothers of women with BC, which play a pivotal role as support person, have reported distress because it was their daughter instead of them suffering a life-threatening disease [18]. In the clinical setting, psychoeducational and communicational interventions, like role playing with psycho-oncologists on how to manage this critical conversation, could help these patients to see the advantages of a sincere communication with relatives regarding their illness [27].

Alleviating the distress of a woman with MBC may be better achieved by focusing on the couple relationship rather than her individual coping [19]. While partners might avoid open discussion of the cancer experience in order to protect the patient, this avoidance has been associated with patient distress. Open communication of couples and families regarding the probability of dying has been linked to positive adjustments, increased cohesion, and decreased destructive conflict, predicting lower mood disturbance of the family following the death. Conversely, lack of open communication and expression may lead to isolation during the MBC disease [19]. Patients may benefit from programs that teach them how to effectively solicit support and teach their partners ways to provide support without inadvertently encouraging maladaptive pain behaviors [28].

Sexuality during terminal illness has been identified as an important component of holistic care, psychosocial functioning, and overall QoL [29,30]. The treatment of BC can lead menopausal symptoms such as vaginal dryness and atrophy, which in turn may result in sexual problems. In the context of cancer, couples often fail to discuss these sexual problems and the changes to their sexual relationship, which in turn may lead to emotional distancing [31] and increased psychological distress [32]. Sexual problems are a concern for MBC couples and were associated with both patients' and partners' depressive symptoms, this association depending on the communication pattern followed by the couple. Mutual constructive communication (i.e., open and constructive spousal discussion) about a cancer-related concern seems to be associated with greater marital satisfaction and decreased distress, while adoption by one of the partners of the opposite communication pattern (i.e., demand-withdrawal communication), increase psychological distress. Thus, MBC patients may benefit from programs that teach couples how to minimize avoidance of conflicts discussion and instead openly and constructively discuss sexual issues and concerns [33].

The impairment of fertility might certainly also affect the life project of MBC patients, but fertility preservation techniques could provoke a moral debate given the advanced stage of the disease. The authors consider it essential that these patients can take an informed decision after being advised by a multidisciplinary team.

Impact of MBC diagnosis on the social life and professional career of young women

Social isolation, activity disruption, financial concerns and return to work of young women with MBC are all important aspects that also need to be contemplated. According to the *Metastatic Breast Cancer Collateral Damage Project*, MBC influences all aspects of patients' lives, including financial, vocational, psychological, social, and physical domains. Participants under the age of 50, reported higher concerns about mortality, uncertainty, financial concerns, and interpersonal concerns [34].

Depressive symptoms, specifically negative affective symptoms such as sadness, may facilitate disruption of social life in women with MBC [35]. Activity disruption, in turn, results in reduction of positive affect, suggesting that the interruption of social and recreational activities by a metastatic cancer diagnosis may reduce her enjoyment of life, happiness, and feelings of hopefulness. Thus, examining specific constellations of depressive symptoms, maintaining patient-valued activities or identifying activities to replace those given up because of the illness, may help preserve a positive attitude towards life [35].

Public awareness and understanding of MBC are limited. Social constraints on disclosure of cancer-related concerns have been associated with distress in various cancer populations [13]. These constraints can stem from objective environmental factors (e.g., others' avoidance, denial, and criticism) or individuals' interpretations of their environment [13]. In the context of MBC, patients have reported close others reacting with fear and discomfort when they attempted to discuss their illness [13]. Misconception and lack of understanding can cause patients to feel they are perceived badly by others, which can result in increased feelings of isolation [4].

Returning to work and normal daily activities can help with social rehabilitation of BC patients [4]. The professional career may play a key social concern and may define the life project of young women with MBC. Some women with MBC characterize their inability to work as a major change in their daily routine. Whereas some women describe feelings of boredom associated with job loss, others noted a profound shift in their self-concept [13].

The prevalence of return to work in BC survivors varies from 43% to 93% within one-year diagnosis [36]. Caution should be taken when interpreting the return to work, as on one side it could reflect regained well-being and reconnection to ordinary life but on the other side could be a consequence of lack of support, financial burden or fear of medical insecurity [36,37]. In other words, return to work might be a choice for some women, while others are forced to do so for financial and health insurance requirements. In this sense it was observed that countries with benefits such as sick leave and disability pensions, which alleviate the financial pressure, delay or reduce the return to work [36]. In a survey of women with MBC, "services to deal with concerns about finances and employment" were considered important by 42% [37]. Moreover, lack of support in the work-place was associated with poor psychological health of patients [36].

The various challenges associated with living with MBC negatively affect women's employment and income. As reported by the *Here & Now Survey*, approximately half of the employed women had to change or give up their employment due to the metastatic diagnosis, while the income declined in almost 70% of patients [38]. MBC might also have a negative influence on the relationship with coworkers, as reported by more than one-quarter of women [38].

Several factors impact the survivors return to work. Within the psychological ones, self-motivation, normalcy and acceptance to maintain a normal life facilitate the return, while depression, worries, frustration, feel of guilt and fear of potential environmental hazards act as barriers. White collar job and support from the friends, family and work-place are other important factors that facilitate survivors return to work [36]. By contrast, socio-demographic factors (such as education or ethnicity), on-going chemotherapy and fatigue, are barriers to the return to work. Although young women with MBC are a sub-population for which labor and social aspects are specially affected by the diagnosis, there are no data related to the return to work of MBC, mainly due to the short life expectancy of these patient population. However, with the arrival of new targeted therapies, the professional future of these women will need to be reconsidered. Since the number of MBC patients willing to return to work will increase, the development and application of interventions to promote work ability will continuously gain importance [37].

Quality of life during treatment

Improving QoL of MBC patients in clinical practice – patients with multiple and unique unmet needs - is one of the key goals of the ABC Global Alliance [4,39]. In this direction, patient support organizations report that those with MBC have greater unmet needs in terms of psychological and financial support, as well as access to services and information about how to deal with ongoing issues of anxiety, pain, and sleep disruption [4]. The *Patient and Caregiver Qualitative Research* survey revealed that 80% of MBC patients report QoL as the main area in need of improvement, followed by emotional care [4]. Knowledge of treatment centers and available therapies, continued employment, travel arrangements to hospital, support with childcare, and aids to improve self-image were important factors to their QoL and sense of empowerment [4]. Thus, patients should be offered appropriate and personalized psychosocial care, supportive care and symptom-related interventions as a routine part of their care from the time of diagnosis of MBC [39].

Confirming the notions reported in the *Patient and Caregiver Qualitative Research* survey, another study showed the impact of self-image, specifically body image, on the QoL of MBC patients. Body image affected women's emotional and physical function and, in turn, their over-all wellness. Although this association was found in middle-aged women (50–65 years), these data point out the importance of how patients see their body and how they evaluate their strengths and resilience regardless of illness [40]. Body shame might therefore not be trivial for MBC patients and this aspect worth further research [40].

Physical dimension

Tumor progression is assumed to be associated with increased symptoms and psychological stress, and, consequently, with a negative impact on QoL. Since data on QoL after progression are rare, the PRAEGNANT research network examined whether disease progression impacted QoL, based on an MBC patient registry. The study used the EORTC-QLQ-C30 v3.0, a general questionnaire to all cancer types and not specific to neither BC nor metastatic disease. Fatigue, nausea, vomiting, dyspnea, appetite loss, and constipation scores were found to be higher in patients with disease progression than in patients without. Disease progression had a significant negative impact on the QoL of MBC patients, emphasizing the importance of delaying the disease progression in these patients [41] with new therapies such as CDK4/6 inhibitors (CDK4/6i) [42–44].

A systematic review of nonpharmacological support strategies to promote QoL in BC patients experiencing cancer-related fatigue, concluded that both supervised and home-based exercise should be recommended to patients, given both its physical and

psychological benefits [45]. Information regarding the efficacy of those strategies in advanced disease and at the end of life is limited and, thus, requires further investigation [45].

Psychological dimension

As concluded by a meta-analysis, psychological interventions appear to be effective in improving survival at 12 months, and in reducing some psychological symptoms in women with MBC [46]. However, no improvement was detected at long-term follow-up, which could be due to methodological issues and, thus, further research would be required. Moreover, both the involvement of family members in psychological treatment or the use of pharmacotherapy as a co-intervention to deal with psychological symptoms such as depression or anxiety, should be investigated [46].

Emotional dimension

BC and its treatments can lead to 'late effects' long after diagnosis, the so-called 'collateral damage'. Collateral damage does not only include biomedical sequelae, but also long-lasting changes in the patients' life, including psychological, social, vocational, financial, and functional aspects. The SHINE (Survey of Health, Impact, Needs, and Experiences) was developed to characterize MBC-related collateral damage to better understand and improve the life of MBC patients. The SHINE project resulted in the first Patient-Reported Outcome questionnaire developed based on the MBC-specific concerns, experiences, and collateral damages as reported directly by the patients' own words. In agreement with other studies, *post hoc* analyses within this study revealed that young women (<50 years), women with low financial resources or with children under 18 years of age at home, were most likely to report collateral damage and to have a poorer QoL [34]. Mortality/uncertainty, financial and employment concerns were higher for those patients with children under 18 living at home compared to those not meeting this criteria [34]. Compared to older women, concerns about mortality/uncertainty, financial and interpersonal concerns were higher in young women, greater interpersonal concerns being directly related to sleep disruption. Moreover, MBC-related collateral damage is significantly associated with psychological health (i.e., depressive symptoms, anxiety), illness management and health behaviors (i.e., physical activity, sleep). The questionnaire needs to be validated and, given the lack of racial and ethnic diversity of interviewed patients, it might need to be further adapted to cultural differences. Nevertheless, the SHINE measure could serve as a tool to identify at risk MBC patients that might profit from psychosocial support, fostering a multidisciplinary approach during the care of MBC patients.

Need for MBC-specific QoL assessments

Throughout several studies, MBC patients have reported poor QoL, more pain and fatigue, and greater difficulty with physical, social, and emotional functioning when compared to those with early-stage disease. The assessment devices used in those studies were designed for cancer patients generally and, thus, do not necessarily capture the disease-specific concerns of MBC patients [34]. In this sense, traditional QoL assessments might not capture MBC specific life-influencing aspects. As acknowledged in the ESO-ESMO guidelines for ABC and endorsed by the here signing authors after a literature review, specific tools for the evaluation of QoL in young women diagnosed with MBC patients should be developed [39]. A similar approach as used in the SHINE project, a joint effort of patients' advocacy groups, psycho-oncologist, nurses and oncologists, could provide valuable insight into the concerns of young women with MBC, as well as detect cultural differences within their priorities and worries. Based on the acquired knowledge, specific tools to measure aspects with a high impact on the QoL of these women must be developed to identify patients' needs of support and to investigate unsolved questions. What is the value in terms of QoL of prolonging progression-free survival in young women with MBC? To what extend is it important to extend OS if we cannot improve QoL? What is the impact off newly emerged targeted and oral therapies on the QoL of these women? What strategies are effective in further improving their QoL?

Implications of new targeted therapies for young women with HR-positive/HER2-negative MBC

In the HR-positive/HER2-negative MBC setting, main treatment strategies are CDK4/6i and drugs targeting the PI3K/mTOR pathways, both combined with hormonal therapy. Within CDK4/6i, treatment options to be combined with aromatase inhibitors or fulvestrant include palbociclib, abemaciclib and ribociclib [47–49].

The activity and safety of several CDK4/6i have been evaluated in premenopausal women. Within the patients included in the PALOMA-3 trial (NCT01942135) [50–52], only 21% (n = 72) pre- or perimenopausal women were treated with palbociclib [51]. In the MONARCH-2 trial (NCT02107703), 16.1% (n = 72) pre- or perimenopausal women were included in the abemaciclib - fulvestrant arm [42]. By contrast, MONALEESA-7 (NCT02278120) is the only dedicated Phase III trial for pre- and perimenopausal luminal MBC patients, having treated 335 patients (median age 43 years; range 25–58 years) with ribociclib plus endocrine therapy [53] and, thus, offering a better view on the premenopausal patient population.

Data from the MONALEESA-7 trial led to the approval of ribociclib in combination with a nonsteroidal aromatase inhibitor (NSAI) and luteinizing hormone-releasing hormone agonist for premenopausal HR+/HER2-negative MBC patients. Patients included in this trial could be treated with NSAI or tamoxifen, approval being based on data showing that median progression-free survival (PFS) was longer with ribociclib compared to placebo (median 23.8 vs 13.0 months; HR 0.55; $p < 0.0001$) [53]. The combination of ribociclib plus tamoxifen is not approved in this setting.

Within the cohorts of patients receiving NSAI (n = 495), a predefined interim analysis (24.6% and 32.4% of deaths reached in the ribociclib and placebo arm, respectively) showed that OS was longer for patients receiving ribociclib (hazard ratio 0.70; 95% CI, 0.50 to 0.98), with median OS still not having been reached in the ribociclib arm. At 42 months, OS in the ribociclib arm was 70.2% while being only 46.0% in the placebo arm [54]. This interim analysis also evaluated QoL of the MONALEESA-7 patients, by comparing time to 10% deterioration (TTD) using the EORTC QLQ-C30 v3.0 questionnaire [44]. Within the NSAI cohort, TTD in global health status was prolonged in the ribociclib arm (HR 0.685; 95% CI, 0.515–0.910). The TTD of pain scores were also prolonged in the ribociclib arm (HR 0.641; 95% CI, 0.430–0.955), while fatigue and nausea/vomiting scores were similar between both treatment arms. Altogether these data show a benefit in terms of survival and QoL for pre- or perimenopausal women receiving ribociclib in combination with NSAI. Further investigations on the QoL benefit of ribociclib for premenopausal MBC patients in the real-world setting are warranted and should assess their specific concerns.

The introduction of more sophisticated and expensive drugs such as targeted therapies, has opened the debate on the real value of new drugs in oncology – determined by the magnitude of clinical benefit towards their cost. Both ASCO and ESMO have created task force groups to develop a system facilitating decision-making

towards a specific therapy, while making an appropriate use of limited public and private resources. These value framework scoring systems take into account the clinical benefit, toxicities, QoL associated to new cancer therapies, balanced against their costs [55,56].

Within the European Union, decisions on whether a specific MBC drug is financed is taken by each health organization system, leading to heterogeneity between countries. However, within the personalized medicine era, decision-making for or against a specific treatment should be taken at an individual level, using personalized tools that consider the objective clinical benefits and the costs, not only economical, but also in terms of toxicities and QoL [57]. Evaluating a patient's priorities is essential to personalize the value of a treatment, as these may differ from patient to patient.

Conclusions

Psychosocial challenges faced by women diagnosed of MBC are different from those diagnosed of early BC [38]. These challenges might have a negative impact particularly in young women, as MBC diagnosis disrupts their life projects, reinforcing their special needs in psychosocial and social support. Given the scarce research and the lack of specific QoL questionnaires [39], the authors think that a joint effort of patients' advocacy groups, psycho-oncologist, nurses and oncologists should detect the specific needs and concerns of young women with MBC and work in offering them a more ad-hoc support. This is crucial to target one of the main goals for MBC patients: the optimization of QoL [4,39]. Since care of young women with BC is complex, a multi-disciplinary approach is paramount to address their specific needs [6].

New available treatments, avoiding chemotherapy, will change the paradigm of MBC diagnosis in young women, providing an extended OS together with an improved QoL. The data from the MONALEESA-7 trial have shown longer OS and improved QoL in premenopausal HR+/HER2-negative MBC patients treated with ribociclib plus endocrine therapy [44,53,54]. Despite the life project disruption caused by MBC diagnosis in young women, extension of survival with an improved QoL, will also increase their specific needs in psychosocial support.

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