Dear Miriam Dellino,

On behalf of the Scientific Committee of the ESGO 2022 Congress, thank you for confirming your availability to present your abstract (below) at the Congress as an ePOSTER PRESENTATION, which will take place on October 27–30, 2022 in Berlin, Germany.

Control #: 1040  
Abstract Title: Nutritional supplementation with myo-inositol–D–chiro-inositol: effect on reproductive system functionality in Long–term Survivors of Lymphoma  
Presenting Author: Miriam Dellino

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Session type: ePoster Presentation  
Room/ Location: ePoster LCD screens on ground floor in the exhibition area.

Please note that ePosters will be displayed on special terminals during the whole congress. However, they will not be presented at a specific session. In addition, all ePosters will be available in the ESGO mobile app and website. It is mandatory to submit an electronic file (PDF) of your ePoster. Detailed instructions are available at the official website here https://congress.esgo.org/programme-2/eposters-instructions-2022/

If you have not yet registered for the meeting, please do so now online at the https://reg.kenes.com/online_reg/2022/esgo/regearly.html

Please note that the main author must have been already registered by August 25 to ensure publication of the abstract. However we have been able to extend the deadline until September 15.
For the continuously updated programme please visit the webpage https://congress.esgo.org/programme-2/interactive-program/ detailed instructions for presenters are published at the website https://congress.esgo.org/programme-2/eposters-instructions-2022/

We look forward to welcoming you in Berlin in October.

Yours sincerely,

ESGO 2021 Congress Secretariat
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Nutritional supplementation with myo-inositol–D-chiro-inositol: effect on reproductive system functionality in Long-term Survivors of Lymphoma

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Abstract:
Introduction/Background: The principal International scientific societies of oncology recommend that Long-term Survivors of Lymphoma join fertility programs. Therefore, we conducted a prospective observational controlled study, with the aim to assess the effects of oral supplementation with Myo-Inositol and D-Chiro-Inositol (MIC) on ovarian function parameters in Long-term Survivors of Lymphoma.

Methodology: Between January 2020 and January 2021, 90 female patients, long-term Survivors of Lymphoma with an average age of 34 years (range 25–44), were considered eligible and enrolled in the study (Figure 1). The study was registered on ClinicalTrials.gov (ID: NCT05410314). We conducted this study on two groups: the first one (A group) underwent oral supplementation with MIC for 12 months, and the second group (B group) underwent follow-up without any nutritional supplement for 12 months. Statistical analysis: The level of statistical significance was set at p ≤ 0.05. Analysis was conducted with STATA/SE 15.0.

Results: In group A a significant reduction after 12 months was observed for follicle-stimulating hormone (FSH), luteinizing hormone (LH), oligomenorrhea and a reduction to the limits of statistical significance for the progesterone (PG) (Table 1).

Conclusion: In our data analysis, comparing ovarian function parameters in group A women between baseline (T0) and after 12 months of oral supplementation with MIC, a significant reduction in FSH...
and an increase in PG and antral follicle count (AFC) of the right ovary resulted. This result could be due, at least in part, to the known MIC effect on ovulation improvement that contrasts with luteal insufficiency, typical in these patients. The limitations of our study should also be considered, such as the lack of previous similar studies, thus not allowing a direct comparison with other clinical experiences, and the low number of enrolled women. Therefore, further studies are needed to confirm our preliminary findings in a larger setting.

### Table 1 Comparison of ovarian function parameters in Long-term Survivors of Lymphoma patients between baseline (T0) and after 12 months of oral supplementation with Myo-Inositol and D-Chiro-Inositol combined therapy (T12; Group A) and between baseline (T0) and after 12 months of follow-up without any nutritional supplement (T12; Group B). AMH: anti-Müllerian hormone; FSH: follicle-stimulating hormone; LH: luteinizing hormone; PG: progesterone; AFC: antral follicle count.

### Author Disclosure Information:

**M. Dellino:** None.  
**G. Cormio:** None.  
**C. Minoia:** None.  
**A. Guarini:** None.  
**E. Silvestris:** None.  
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**A.S. Laganà:** None.  

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Nutritional supplementation with myo-inositol-D-chiro-inositol: effect on reproductive system functionality in Long-term Survivors of Lymphoma

INTRODUCTION

The progressive improvement of lymphoma treatment has led to an important prolongation of patient survival and life expectancy. The principal international scientific societies of oncology now therefore recommend that long-term survivors of lymphoma join fertility programs. Specifically, fertile-age patients should be assisted by a multidisciplinary team, including specialists dedicated to fertility preservation in oncology, in order to support the completion of their reproductive project. In the general population, the use of Myo-Inositol and D-Chiro-Inositol (MIDCI) has been demonstrated to be an effective choice to treat ovarian dysfunctions, with a consequent improvement in reproductive outcomes, so it may represent an adjuvant strategy for this purpose. We therefore conducted a pilot prospective case-control study to evaluate the potentialities of this nutritional supplement, with the aim of optimizing reproductive function in female long-term survivors of lymphoma.

RESULTS

Patients enrolled in this study received the first diagnosis of lymphoma at a range of 14–41 years old (an average age of 27 years; CHL 85% and DLBCL 15%) and were long-term survivors. In group A (long-term survivors of lymphoma who underwent MIDCI therapy, Table 1), a significant reduction after 12 months was observed for FSH (p = 0.0199), LH (p = 0.0219), and oligomenorrhea (p < 0.0001) and a reduction in the limits of statistical significance for PG level (p = 0.0501); in addition, the AFC of the right ovary at T12 increased significantly (p = 0.0085).

In group B (long-term survivors of lymphoma without MIDCI as nutritional supplement, Table 2), a significant reduction after 12 months was observed for oligomenorrhea (p = 0.0023), and a significant worsening was observed for dyspareunia (p = 0.0001) and dysmenorrhea (p < 0.0001). None of the other ovarian function parameters (Table 1), menstrual cycle characteristics, dysmenorrhea, or dyspareunia (Table 2) showed significant differences between baseline (T0) and after 12 months (T12).

CONCLUSION

In conclusion, considering the safety of MIDCI, new scenarios and recommendations for fertility care for young oncological survivors could be realized in the future.

REFERENCES

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