

## News in focus

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### EGOI is Taking Off

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The poster features the EGOI logo (a stylized blue circle with three dots) and the text "EGOI The Experts Group on Inositol in Basic and Clinical Research". Below this, it says "International Webinar" in a dark blue rounded rectangle. The main title is "Inositols in Polycystic Ovary Syndrome An overview on the advances". The date and time are "Friday 15 May 2020 6.00pm GMT+2 | Duration: 1,5 hours". The background is light blue with a molecular structure of inositol. The Lo.Li. Pharm logo is in the bottom right corner.

*Organisms* reports the recent birth of EGOI platform, namely the website of the Experts Group on Inositol in Basic and Clinical Research.

This group involves 31 international personalities from 12 different countries, skilled in the field of inositol physiology and therapy, with the aim to discuss scientific contents relating to their own expertise in the field.

Inositol is a natural molecule that is found in the phospholipids of cell membranes, in the lipoproteins of the plasma and, in the form of inositol-phosphates, in the cell nucleus [1,2].

When we speak about inositol, we mean a group of nine different stereoisomers, so that it would be more correct to use the plural “inositols”.

Among these, however, the term inositol is generally used to refer to the most bioavailable type, myo-inosi-

tol. In addition to Myo-inositol there is also the isomer D-chiro-inositol.

Both, in the form of inositolphosphoglycans, are “second messengers” of the insulin hormone [3].

Even if their biological functions are often confused, we need to remember that Myo-inositol and D-chiro-inositol play different roles in the body.

Myo-inositol is involved in the cellular absorption of glucose, meanwhile D-chiro in metabolism and storage of glucose in the form of glycogen [3].

The benefits of both Myo- and D-chiro-inositol are now well established.

These isomers demonstrated to be effective in the prevention and in the treatment of many different diseases, such as polycystic ovary syndrome (PCOS), insulin resistance (IR), metabolic syndrome, gestational diabe-

tes mellitus (GDM) and neural tube defects (NTDs) [4-7].

Recently, the interest in inositol has also involved other areas, such as cardiology [8] and oncology [9,10].

Moreover, inositol phosphates derivatives, especially those downstream the activation of specific inositol kinases, play critical roles in chromatin remodelling and DNA methylation. Overall, the participation of those metabolites seems to exert unexpected key functions during morphogenesis and cell fate commitment, in both natural and pathological processes.

However, even though data and results on the use of inositols are progressively increasing, some key concepts are still unclarified, especially concerning the proper use and combination of inositol isomers in different clinical settings.

EGOI focus its activity in fostering advanced studies and scientific debate on these arguments, by enhancing the cooperation and scientific networking among scientists from different countries.

To visit the EGOI website: [www.inositolgroup.com](http://www.inositolgroup.com)

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