



IRISH MEDICINES BOARD

New Safety Information on drospirenone-containing combined oral contraceptives (Yasmin, Yasminelle, YAZ and generics*) and risk of venous thromboembolism

Recent epidemiological studies have shown that the risk of venous thromboembolism (VTE) for drospirenone-containing combined oral contraceptives (COCs) is higher than for levonorgestrel-containing COCs (so-called second generation COCs) and may be similar to the risk for COCs containing desogestrel or gestodene (so-called third generation COCs).

Yasmin (ethinylestradiol 0.03mg + drospirenone 3mg) has been authorised in the EU since 2000 and contains the progestogen drospirenone. Since then, other drospirenone-containing COCs have been approved including YAZ and Yasminelle (ethinylestradiol 0.02mg + drospirenone 3mg). The risk of VTE has been continuously monitored since approval and in 2010, the product information was updated to reflect data from two studies which indicated that the risk of VTE with drospirenone-containing COCs was somewhere between the risk associated with levonorgestrel-containing COCs and those containing gestodene and desogestrel (See [IMB Drug Safety Newsletter 37th Edition](#) on [www.imb.ie](#) and [MIMS Ireland June 2010](#)). Further data have now become available, including results from epidemiological studies¹⁻⁷ evaluating the association between drospirenone-containing COCs and VTE, which allow firmer conclusions to be reached about the level of risk.

These data have been reviewed by the Pharmacovigilance Working Party (PhWVP) of the European Medicines Agency and the results of this review have shown that drospirenone-containing COCs are associated with a higher risk of VTE than levonorgestrel-containing COCs and that the risk for drospirenone may be similar to the risk for COCs containing desogestrel or gestodene. The PhWVP recommended that the product information for all drospirenone-containing COCs be updated to reflect these conclusions. The assessment has not changed the conclusion that the risk of VTE with any COC (including those containing drospirenone) is very small.

Risk of VTE with Combined Oral Contraceptives

Since the introduction of COCs in 1961, VTE has been a well-known but rare adverse event. VTE has been reported with the use of all COCs, including those containing ethinylestradiol + drospirenone, such as Yasmin, Yasminelle and YAZ. Of 100,000 women who are not using a COC and are not pregnant, about 5 to 10 may experience a VTE in one year. The corresponding figures for women taking COCs range from about 20 cases per 100,000 women in one year of use

for levonorgestrel-containing COCs to 40 cases per 100,000 women in one year of use for desogestrel- or gestodene-containing COCs. Of 100,000 women who are pregnant around 60 may experience a VTE.

Advice to Healthcare Professionals

- Recent evidence suggests that the risk of VTE for drospirenone-containing COCs is higher than for levonorgestrel-containing COCs (so-called second generation COCs) and may be similar to the risk for COCs containing desogestrel or gestodene (so-called third generation COCs).
- The risk of VTE in women who use drospirenone-containing COCs (including Yasmin, Yasminelle and YAZ), as for all combined oral contraceptive pills, is smaller than the risk of VTE associated with pregnancy.
- Prescribers should take this new evidence into consideration when discussing the most suitable type of contraceptive with a woman who wants to start or switch contraception.
- Prescribing decisions should also take into account each woman's relevant medical history and any associated risk factors and contraindications.
- All patients should be advised to report symptoms of unusual pain, redness or swelling in the legs; sudden shortness of breath or difficulty in breathing; sudden coughing for no apparent reason.
- All COCs, including Yasmin, Yasminelle and YAZ, should be prescribed with caution to obese women (BMI>30), or those with a higher baseline risk of VTE for other reasons.
- There is no reason for women to stop taking drospirenone-containing COCs, such as Yasmin, Yasminelle and YAZ, or any other COC on the basis of this review.

Key Message

New epidemiological studies have shown that the risk of VTE for drospirenone-containing COCs is higher than for levonorgestrel-containing COCs (so-called second generation COCs) and may be similar to the risk for COCs containing desogestrel or gestodene (so-called third generation COCs).

The assessment has not changed the conclusion that the risk of VTE with any COC (including Yasmin, YAZ, and Yasminelle) is very small.

When used appropriately the benefits of all COCs far outweigh the risk of VTE, which is rare.

**Brand names include Lioflora, Palandra and Rimedia.
References are available upon request from the Irish Medicines Board*

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