Use of Colchicine Since FDA Approval of LoDoCo for ASCVD Prevention

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BACKGROUND

- In the modern era, atherosclerosis is recognized as a systemic illness involving not only lipid dysregulation, but also chronic endothelial injury and systemic inflammation.
- It is therefore imperative that clinicians advance therapeutic strategies by targeting the multiple axes underlying atherosclerotic cardiovascular disease to optimize patient outcomes.
- One relatively novel strategy is the use of a non-novel drug, colchicine, a potent anti-inflammatory agent.
- We therefore aimed to evaluate its use by cardiologists in light of the landmark trials.

METHODS

- The IQVIA National Prescription Audit database was used for our analysis.
- It represents 93% of sales of retail prescription drugs dispensed at the state level, and the data has been projected to represent 100% of retail prescription drug sales.
- A descriptive analysis of annual prescriptions of colchicine was conducted from January 2017 to April 2023.

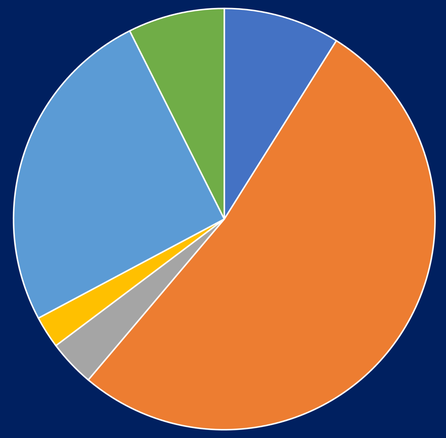
RESULTS

- The data demonstrates that a small fraction of colchicine prescriptions come from cardiologists.
- The publication of the large trials demonstrating benefit in ACSVD corresponded to a small uptick in colchicine prescriptions in late 2020 to early 2021. from about 8,000 to 10,000, followed by a plateau.
- The proportion of cardiologist prescribers also increased from about 2.7% to 3.5%.

CONCLUSION

- As a systemic anti-inflammatory agent, colchicine presents several diverse potential benefits across a wide range of diseases involving the breadth of organ systems.
- Systemic inflammation is implicated in the pathogenesis of atherosclerotic cardiovascular disease and the use of colchicine in clinical trials has already shown benefit.
- As the prevalence of its use rises, emerging data will shed light on the further untapped potential in the drug which has been used for years.

Despite compelling data supporting low-dose colchicine (LoDoCo) use for ASCVD prevention, prescriptions by cardiologists continue to be sparce.



Percentage of colchicine prescriptions over a 12-month period by different specialties showing that cardiologists continue to lag in their prescriptions compared to other specialties. (Cardiologists in grey, PCPs/Internal Medicine in Orange)

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DISCUSSION

- Studies have suggested that colchicine may reduce cardiovascular events, especially in patients with a history of coronary artery disease.
- The LODOCO trial demonstrated a significant benefit with a reduction in the combined risk of acute coronary syndrome, out-of-hospital cardiac arrest, and non-cardioembolic ischemic stroke.
- The COLCOT trial found that colchicine significantly reduced the risk of a composite outcome of major adverse cardiovascular events (MACE) compared to placebo.
- More recently, LoDoCo2 demonstrated a significant reduction in the primary composite MACE endpoint.
- The FDA has approved low-dose colchicine for ASCVD prevention in June 2023.
- Low use by cardiologists may be due to factors such as concerns about side effects, lack of clear guidelines, and limited awareness of the emerging data supporting its cardiovascular benefits.
- Efforts to increase awareness amongst of its use to cardiologists and increasing its class of recommendation beyond 2b may yield to increasing prescriptions.

FIGURE 1

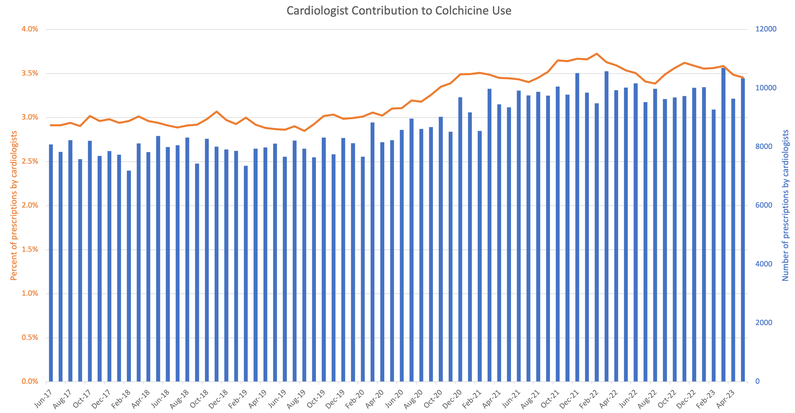


Figure 1 above shows cardiologists contribution to colchicine prescriptions. Despite FDA approval of low-dose colchicine, it has continued to lack.

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DISCLOSURE INFORMATION

No Disclosures.

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