

# SEVERE HYPERTRIGLYCERIDEMIA (sHTG)

## What is sHTG?

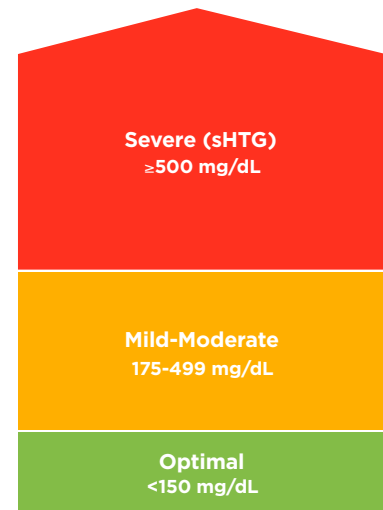
sHTG is defined by severely high fasting **triglyceride (TG) levels  $\geq 500$  mg/dL** and characterized by an increased risk of acute pancreatitis and atherosclerotic cardiovascular disease.<sup>1</sup>



**3 million in the U.S.** are estimated to be living with sHTG, and **~1 million** are high-risk.<sup>\*2-4</sup>

*\*High-risk sHTG includes those with triglycerides  $\geq 880$  mg/dL, or triglycerides  $\geq 500$  mg/dL and a history of acute pancreatitis.*

## Optimal vs. High Fasting Triglycerides<sup>1</sup>



## sHTG can be caused by a combination of factors, including:<sup>1,5</sup>

- Lifestyle**  
(e.g., high alcohol intake, poor diet)
- Clinical conditions**  
(e.g., diabetes, obesity, HIV, pregnancy)
- Medications**  
(e.g., antidepressants, oral contraceptives, antiretrovirals)
- Genetic factors**  
(e.g., familial chylomicronemia syndrome, multifactorial chylomicronemia syndrome)

## What are the risks of sHTG?

The **risks associated with sHTG are often underestimated and potentially life-threatening**, as TGs – unlike other lipids – can fluctuate greatly between fasting and non-fasting states.<sup>1,6</sup>

The risks increase as TG levels continue to rise.<sup>1,7,8</sup>



### Acute Pancreatitis:

- Considered a medical emergency, acute pancreatitis causes debilitating abdominal pain that often requires prolonged hospitalization, can lead to permanent organ damage and can be life-threatening.<sup>9</sup>
- Once a patient with sHTG has had an episode, their risk of another can be as high as 24%.<sup>10</sup>



### Atherosclerotic Cardiovascular Disease (ASCVD):

- Caused by the buildup of plaque in arteries, ASCVD can lead to heart disease and stroke.<sup>1,11,12</sup>
- People with sHTG are 2x as likely to have ASCVD events compared to people with optimal TG levels (<150 mg/dL).<sup>12</sup>

sHTG is also associated with emotional, cognitive and physical symptoms – such as diarrhea, brain fog, fatigue, and abdominal pain.<sup>13,14</sup>

# How is sHTG diagnosed and managed?



## Diagnosis



sHTG can be diagnosed using a lipid panel blood test.<sup>15</sup> However, lipid panel blood tests are not able to determine the cause of high TGs.<sup>15</sup> People with sHTG are encouraged to speak with their doctor about potential causes.<sup>15</sup>



## Management

sHTG may be impacted by other comorbidities and difficult to control, requiring vigilant management.<sup>1,16,17</sup> Current consensus recommendations highlight the urgency to lower TG levels below 500 mg/dL to minimize the risk for serious health complications.<sup>1,16,18,19</sup>

### CURRENT APPROACHES INCLUDE:

-  Lifestyle changes (e.g., low-fat diet, exercise)<sup>17</sup>
-  Traditional therapies (e.g., fibrates, statins, omega-3 fatty acids)<sup>1,20</sup>

However, these approaches do not adequately or consistently lower TG levels or reduce the risks of sHTG in all patients.<sup>17,19,20</sup>

There's an **urgent need for treatment** that can **lower dangerously high TGs** and help manage the risk of acute pancreatitis in patients with sHTG.

## References

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