Algorithm: y := TRMV_LT_UNB_VAR1(L, x)

Partition $L \rightarrow \left(\begin{array}{c|c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right)$, $x \rightarrow \left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right)$

where L_{TL} is $0 \times 0, x_T$ is 0×1

while $m(L_{TL} < m(L)$ **do**

Repartition

$$\left(\begin{array}{c|c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right) \rightarrow \left(\begin{array}{c|c|c} L_{00} & L_{01} & L_{02} \\ \hline L_{10}^T & \lambda 11 & L_{12}^T \\ \hline L_{20} & L_{21} & L_{22} \end{array}\right),$$

$$\left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right) \rightarrow \left(\begin{array}{c} x_0 \\ \hline \chi_1 \\ \hline x_2 \end{array}\right)$$

$\chi_1 := \lambda_{11}\chi_1$
$\chi_1 := L_{21}^T x_2 + \chi_1$

Continue with

$$\left(\begin{array}{c|c} L_{TL} & L_{TR} \\ \hline L_{BL} & L_{BR} \end{array}\right) \leftarrow \left(\begin{array}{c|c|c} L_{00} & L_{01} & L_{02} \\ \hline L_{10}^T & \lambda 11 & L_{12}^T \\ \hline L_{20} & L_{21} & L_{22} \end{array}\right),$$

$$\left(\begin{array}{c} x_T \\ \hline x_B \end{array}\right) \leftarrow \left(\begin{array}{c} x_0 \\ \hline \chi_1 \\ \hline x_2 \end{array}\right)$$

endwhile