

$$(\mathbf{Y}/\Delta\mathbf{Y}) / (\mathbf{Y}/\Delta\mathbf{Y})_{\text{u}}$$

HAULAB-Y contrast

normalized to $(Y/\Delta Y)_u$

$$C_T/C_{T0}=(Y/\Delta Y)/(Y/\Delta Y)_0$$

$$L^* = s (Y/Y_p)^n - d \quad (Y_p=100, Y_p=18, s=22, n=0,31, d=30) \quad [1a]$$

$$L^* = r (Y/Y_u)^n - d \quad (r = s (Y_u/Y_u)^n = 13,49, L^*_u = r - d) \quad [1b]$$

$$Y/dY = Y/\{[(Y_n/(ns))](Y/Y_n)^{1-n}\} \quad [4c]$$

$$(Y/Y)_u = Y_u / \{ [(Y_n / (n s))] (Y_u / Y_n)^{1-n} \} \quad [4d]$$

$$(Y/dY)/(Y/dY)_u = (Y/Y_u)^n \quad [4e]$$

