Then we have proved in Section 3 of Chapter 0 that
$$H^1(\Delta', \mathcal{O}) = H^2(\Delta', \mathbb{Z}) = 0.$$

⌈ By P27. $H_{\bar\partial}^{p,q}(\Delta^{*k} \times \Delta^{l}) = 0$ for $q \geq 1$.
$\Rightarrow$ $k = 1$, $l = 1$, $p = 0$, $H_{\bar\partial}^{0,1}(\Delta') = H^1(\Delta', \mathcal{O}) = 0$ ⌋

From the exact cohomology sequence of the exponential sheaf sequence this implies that $H^1(\Delta', \mathcal{O}^*) = 0$. Consequently, if $D^* = D \cap \Delta'$, then the line bundle $[D^*] \to \Delta'$ is trivial and we conclude that the analytic curve D^* is the divisor of some $h \in \mathcal{O}(\Delta')$.

⌈ Since $H^1(\Delta', \mathcal{O}^*)$ is the set of all line bundles on Δ', by $H^1(\Delta', \mathcal{O}^*) = 0$, $\exists$ only one bundle on Δ' which is trivial. $\Rightarrow$ $[D^*]$ is the trivial line bundle over Δ'.
$\Rightarrow$ $\exists$ a section σ on Δ' s.t. $(\sigma = 0) = D^*$ which is holomorphic. $\Rightarrow$ Let $\sigma = h \in \mathcal{O}(\Delta')$. ⌋

We may assume that D does not contain the line $\{z_1 = 0\}$, and therefore $D \cap \{z_1 = 0\}$ consists of a finite number of points in the punctured disc $0 < |z_2| < 1$.

⌈ If D contains the line $\{z_1 = 0\}$, by changing the coordinates, we may assume that $D \not\supset \{z_1 = 0\}$. $\Rightarrow$ $D \cap \{z_1 = 0\}$ is a set of a finite number of points, unless $D \supset \{z_1 = 0\}$. ⌋