Let $A$ be a uniform algebra on a set $X$, and fix distinct points $\zeta_1, \ldots, \zeta_n$ in $X$. The associated interpolation body is the set

$$E = \{ (z_1, \ldots, z_n) \in \mathbb{C}^n \mid \forall \epsilon > 0 \exists f \in A, \|f\| < 1 + \epsilon, f(\zeta_i) = z_i, \ i = 1, \ldots, n \}.$$ 

Note that $E$ is a compact, convex subset of $\mathbb{C}^n$. As a special case, consider $X = \Omega$, a complex manifold, and $A = H^\infty(\Omega)$. Pick’s theorem describes $E$ in terms of algebraic inequalities when $\Omega$ is the unit disk in $\mathbb{C}$, and hence $E$ is a semialgebraic set in this case. More generally, it is known that $E$ is semialgebraic when $\Omega$ is the unit bi-disk in $\mathbb{C}^2$ or a finite Riemann surface. In the negative direction, we prove the following

**Theorem.** There exists an interpolation body $E$ for a uniform algebra so that $E$ is not semialgebraic.

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