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Michael A. Bennett* (bennett@math.ubc.ca), 1984 Mathematics Road, Vancouver, BC V6T 1Z2, Canada, and **Samir Siksek**. *Erdos-Selfridge and supersingularity*.

If k is a sufficiently large positive integer, we show that the Diophantine equation

$$n(n+d) \cdots (n+(k-1)d) = y^\ell$$

has at most finitely many solutions in positive integers n, d, y and ℓ , with $\gcd(n, d) = 1$ and $\ell \geq 2$. Our proof relies upon Frey-Hellegouarch curves and results on supersingular primes for elliptic curves without complex multiplication, derived from upper bounds for short character sums and sieves, analytic and combinatorial. (Received September 17, 2017)