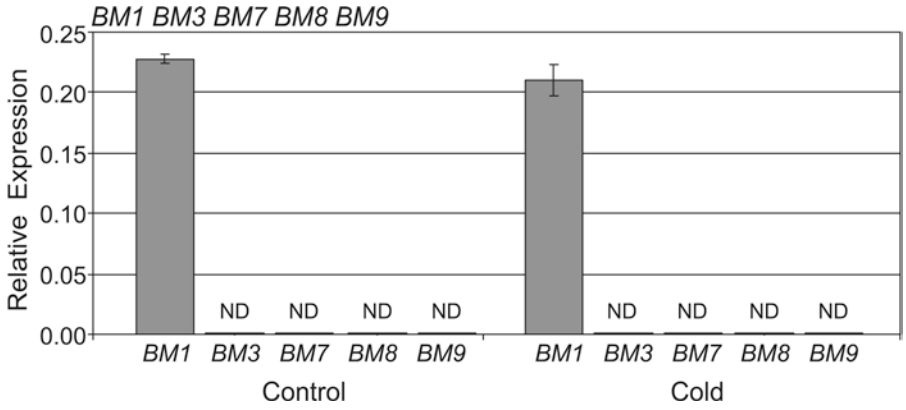
The influence of vernalization and daylength on expression of flowering-time genes in the leaves and shoot apex of barley (*Hordeum vulgare*). *S Sasani, MN Hemming, SN Oliver, A Greenup, R Tavakkol-Afshari, S Mahfoozi, K Poustini, H-R Sharifi, ES Dennis, WJ Peacock and B Trevaskis.*

Supplementary Material

Supplemental Figure S1. Expression of *APETALA1*-like and *SEPALLATA*-like MADS box genes in seeds at normal or vernalizing temperatures.
Expression of *BARLEY MADS1 (BM1), BM3, BM8, BM7* and *BM9*, relative to *ACTIN* in seeds germinated at 20 degrees for 6 days (control) versus seeds germinated at 4 degrees for 7 weeks (cold). Seeds were harvested with an average coleoptile length of 4 cm in both treatments. The shoot apex was at an equivalent stage of vegetative development (no elongation) in both treatments. Error bars show standard error. ND denotes no expression detected. Primer pairs for *BM2, BM8, BM7* and *BM9* detected expression of target genes in RNA extracted from later developmental stages.



Supplemental Figure S2. Flowering time of the winter wheat cv. Norstar after seed vernalization treatments, in long days. (A) Days to heading for non-vernalized plants compared to plants grown from seeds vernalized for different durations. (B) Final Leaf Number of non-vernalized plants compared to plants grown from seeds vernalized for different durations. Error bars show standard error.