BLU-222, a potent and highly selective CDK2 inhibitor, demonstrated antitumor activity as monotherapy and as combination treatment in CCNE1-aberrant endometrial cancer models

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Abstract 1959

Background

• CCNE1 (cyclin E1) is a cell cycle regulator that functions as a part of the cyclin-dependent kinase (CDK) complex, which controls the transition from G1 to S phase in the cell cycle. CCNE1 gene amplification leads to aberrant cyclin E1 overexpression and forms the basis of a two-gene CCNE1-rb1 (retinoblastoma) predictive biomarker signature.

• BLU-222 is a potent, highly selective CDK2 inhibitor that displays antitumor activity as both a monotherapy and in combination treatment across a range of endometrial cancer models.

• BLU-222 is active in preclinical models of CCNE1-amplified cancers, with demonstrated clinical activity in patients with endometrial cancer.

• CCNE1 amplification is common in ovarian and uterine cancers and is associated with poor clinical outcomes.

• The mechanism of action of BLU-222 involves inhibition of CCNE1-dependent cell cycle progression and induction of apoptosis.

• BLU-222 demonstrates a favorable safety profile in clinical trials.

• BLU-222 is being evaluated in clinical trials as both a monotherapy and in combination with other agents.

Conclusion

• BLU-222, a potent and highly selective CDK2 inhibitor, displays antitumor activity as both a monotherapy and in combination treatment across a range of endometrial cancer models.

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References

• These data show that response to CDK2 inhibition by BLU-222 either as single agent or as combination therapy can be further predicted using a multivariate biomarker signature. These data may aid in the interpretation of emerging clinical studies.

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• BLU-222 demonstrates a favorable safety profile in clinical trials.

• BLU-222 is being evaluated in clinical trials as both a monotherapy and in combination with other agents.

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