Title of Invention

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Experience:

Market Needs:

Currently all the clinical cytometry exam interpretation relies on physicians perform time consuming and labor intensive manual gating process on series of 2-D scatter plots to make a conclusive diagnosis. Currently, there is a growing interpretation manpower shortage and ,the inter-physician idiosyncrasy can't be resolved if we continue to use manual gating in routine practice.

Our Technology:

In this invention, a new method is proposed to improve the efficiency and objectivity of flow cytometry data interpretation using a combination of different machine learning models.

Strength:

Time consuming and inter-interpreter idiosyncrasy are the biggest drawback of current flow cytometry interpretation method (manual gating on analysis software). In recent years, new tools haven been developed but mostly are for single cell classification purposes, not able to perform overall specimen status evaluation for the clinical diagnosis purposes. Our technique utilize combination of autoencoder, fisher-scoring vectorization and SVM to perform the classification, and our experiments validated the efficiency and objectivity of this approach.

Competing Products:

Intellectual Properties:

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