Microarray analysis has become a widely used tool for the generation of gene expression data on a genomics scale. Although many significant results have been derived from microarray studies, one limitation has been the lack of standards for presenting and exchanging such data.

Brazma et al., present a proposal, the Minimum Information About a Microarray Experiment (MIAME), that describes the minimum information required to ensure that microarray data can be easily interpreted and that results derived from its analysis can be independently verified. The ultimate goal of this work is to establish a standard for recording and reporting microarray-based gene expression data, which will in turn facilitate the establishment of databases and public repositories and enable the development of data analysis tools. With respect to MIAME, they concentrate on defining the content and structure of the necessary information rather than the technical format for capturing it [1)].

1)
Brazma A, Hingamp P, Quackenbush J, Sherlock G, Spellman P, Stoeckert C, Aach J, Ansorge W, Ball CA, Causton HC, Gaasterland T, Glenisson P, Holstege FC, Kim IF, Markowitz V, Matese JC, Parkinson H, Robinson A, Sarkans U, Schulze-Kremer S, Stewart J, Taylor R, Vilo J, Vingron M. Minimum information about a microarray experiment (MIAME)-toward standards for microarray data. Nat Genet. 2001 Dec;29(4):365-71. PubMed PMID: 11726920.