

# Resource Summary Report

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## ALEA

RRID:SCR\_006417

Type: Tool

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### Proper Citation

ALEA (RRID:SCR\_006417)

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### Resource Information

**URL:** <http://www.bcgsc.ca/platform/bioinfo/software/alea>

**Proper Citation:** ALEA (RRID:SCR\_006417)

**Description:** A computational software toolbox for allele-specific (AS) epigenomics analysis. It incorporates allelic variation data within existing resources, allowing for the identification of significant associations between epigenetic modifications and specific allelic variants in human and mouse cells. It provides a customizable pipeline of command line tools for AS analysis of next-generation sequencing data (ChIP-seq, RNA-seq, etc.) that takes the raw sequencing data and produces separate allelic tracks ready to be viewed on genome browsers. ALEA takes advantage of the available genomic resources for human (The 1000 Genomes Project Consortium) and mouse (The Mouse Genome Project) to reconstruct diploid in-silico genomes for human or hybrid mice under study. Then, for each accompanying ChIP-seq or RNA-seq dataset, it generates two Wiggle track format (WIG) files from short reads aligned differentially to each haplotype.

**Abbreviations:** ALEA

**Resource Type:** software toolkit, software resource

**Defining Citation:** [PMID:24371156](https://pubmed.ncbi.nlm.nih.gov/24371156/)

**Keywords:** allele, epigenomics, analysis, chip-seq, rna-seq, allelic variation, next-generation sequencing

**Funding:**

**Availability:** Academic Free License

**Resource Name:** ALEA

**Resource ID:** SCR\_006417

**Alternate IDs:** OMICS\_02193

**Record Creation Time:** 20220129T080236+0000

**Record Last Update:** 20250412T055053+0000

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## Ratings and Alerts

No rating or validation information has been found for ALEA.

No alerts have been found for ALEA.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 90 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [FDI Lab - SciCrunch.org](#).

Neeter LMFH, et al. (2024) Contrast-enhanced mammography versus conventional imaging in women recalled from breast cancer screening (RACER trial): a multicentre, open-label, randomised controlled clinical trial. *The Lancet regional health. Europe*, 44, 100987.

Heemskerk SCM, et al. (2024) Sacral Neuromodulation Versus Conservative Treatment for Refractory Idiopathic Slow-transit Constipation: The Randomized Clinical No.2-Trial. *Annals of surgery*, 279(5), 746.

Dixon F, et al. (2024) Robotic assisted surgery reduces ergonomic risk during minimally invasive colorectal resection: the VOLCANO randomised controlled trial. *Langenbeck's archives of surgery*, 409(1), 142.

Klaver KM, et al. (2024) Internet-based cognitive rehabilitation for working cancer survivors: results of a multicenter randomized controlled trial. *JNCI cancer spectrum*, 8(1).

Hermans K, et al. (2023) Effectiveness and cost-effectiveness of combined asynchronous telemonitoring and patient-initiated care for spondyloarthritis: protocol for a pragmatic multicentre randomised controlled trial (TeleSpA Study). *BMJ open*, 13(2), e067445.

Rozeman EA, et al. (2023) IMPemBra: a phase 2 study comparing pembrolizumab with

intermittent/short-term dual MAPK pathway inhibition plus pembrolizumab in patients with melanoma harboring the BRAFV600 mutation. *Journal for immunotherapy of cancer*, 11(7).

Reijers ILM, et al. (2023) IFN- $\gamma$  signature enables selection of neoadjuvant treatment in patients with stage III melanoma. *The Journal of experimental medicine*, 220(5).

van den Bosch CH, et al. (2023) CATERPILLAR-study protocol: an assessor-blinded randomised controlled trial comparing taurolidine-citrate-heparin to heparin-only lock solutions for the prevention of central line-associated bloodstream infections in paediatric oncology patients. *BMJ open*, 13(3), e069760.

Geubels BM, et al. (2023) Optimisation of Organ Preservation treatment strategies in patients with rectal cancer with a good clinical response after neoadjuvant (chemo)radiotherapy: Additional contact X-ray brachytherapy versus eXtending the observation period and local excision (OPAXX) - protocol for two multicentre, parallel, single-arm, phase II studies. *BMJ open*, 13(12), e076866.

Quint EE, et al. (2023) PREhabilitation of CAandidates for REnal Transplantation (PreCareTx) study: protocol for a hybrid type I, mixed method, randomised controlled trial. *BMJ open*, 13(7), e072805.

Dushianthan A, et al. (2023) A randomized controlled trial of nebulized surfactant for the treatment of severe COVID-19 in adults (COVSurf trial). *Scientific reports*, 13(1), 20946.

Fennell D, et al. (2023) Evaluating niraparib versus active symptom control in patients with previously treated mesothelioma (NERO): a study protocol for a multicentre, randomised, two-arm, open-label phase II trial in UK secondary care centres. *BMJ open*, 13(11), e073120.

Rodriguez-Wallberg KA, et al. (2023) ProFertil study protocol for the investigation of gonadotropin-releasing hormone agonists (GnRHa) during chemotherapy aiming at fertility protection of young women and teenagers with cancer in Sweden-a phase III randomised double-blinded placebo-controlled study. *BMJ open*, 13(12), e078023.

Fraterman I, et al. (2023) An eHealth App (CAPABLE) Providing Symptom Monitoring, Well-Being Interventions, and Educational Material for Patients With Melanoma Treated With Immune Checkpoint Inhibitors: Protocol for an Exploratory Intervention Trial. *JMIR research protocols*, 12, e49252.

Veldscholte K, et al. (2022) Continuous Versus Intermittent Nutrition in Pediatric Intensive Care Patients: Protocol for a Randomized Controlled Trial. *JMIR research protocols*, 11(6), e36229.

Tamborero D, et al. (2022) The Molecular Tumor Board Portal supports clinical decisions and automated reporting for precision oncology. *Nature cancer*, 3(2), 251.

van Doorn T, et al. (2022) Single use versus reusable catheters in intermittent catheterisation for treatment of urinary retention: a protocol for a multicentre, prospective, randomised

controlled, non-inferiority trial (COMPARE). *BMJ open*, 12(4), e056649.

Neuhann JM, et al. (2022) A multinational, phase 2, randomised, adaptive protocol to evaluate immunogenicity and reactogenicity of different COVID-19 vaccines in adults ?75 already vaccinated against SARS-CoV-2 (EU-COVAT-1-AGED): a trial conducted within the VACCELERATE network. *Trials*, 23(1), 865.

van Welie N, et al. (2022) Can hysterosalpingo-foam sonography replace hysterosalpingography as first-choice tubal patency test? A randomized non-inferiority trial. *Human reproduction (Oxford, England)*, 37(5), 969.

Loohuis AM, et al. (2022) One year effectiveness of an app-based treatment for urinary incontinence in comparison to care as usual in Dutch general practice: A pragmatic randomised controlled trial over 12 months. *BJOG : an international journal of obstetrics and gynaecology*, 129(9), 1474.