



## Description

*This guest post is drafted by an expert team from Scite. Scite is an award-winning platform for discovering and appraising scientific articles via Smart Citations. With this post, scite aims to share insights on how users can evaluate citations and stay up to date with the latest literature!*

Citations are a critical part of scientific research and publishing; they connect research findings and serve as a measure for impact. As a recent editorial proclaimed, “[Citations Rule Everything Around Me](#).” While [citations are crucial to research](#) and research publishing, they are quite limited in other ways. For example, a citation made to strongly dispute a claim would be counted the same way as a citation that is used to strongly support it. Knowing that a paper has received 100 citations indeed gives some indication of impact. However, it doesn’t say what kind of impact it had, and that is crucial!

## Scite- The “Smart Citations” Platform

Scite is a new platform that introduces “Smart Citations”! Smart Citations allow users to see how a scientific paper has been cited by providing the textual context of the citation. Furthermore, it also gives

a classification describing whether it provides supporting or disputing evidence for the cited claim.

scite\_

Q DOI, title, author etc.

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Blog

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Elife 2015 DOI: [10.7554/elife.05068](https://doi.org/10.7554/elife.05068)

## Chromosome mis-segregation and cytokinesis failure in trisomic human cells 🔔 Set Notification

Joshua M Nicholson, Joana C Macedo, Aaron J Mattingly, Darawalee Wangsa, Jordi Camps, Vera Lima, Ana M Gomes, Sofia Dória, Thomas Ried, Elsa Logarinho, Daniela Cimini

### Abstract:

Cancer cells display aneuploid karyotypes and typically mis-segregate chromosomes at high rates, a phenotype referred to as chromosomal instability (CIN). To test the effects of aneuploidy on chromosome segregation and other mitotic phenotypes we used the colorectal cancer cell line DLD1 (2n = 46) and two variants with trisomy 7 or 13 (DLD1+7 and DLD1+13), as well as euploid and trisomy 13 amniocytes (AF and AF+13). We found that trisomic cells displayed higher rates of chromosome mis-segregation compared to their euploid counterparts. Furthermore, cells with trisomy 13 displayed a distinctive cytokinesis failure phenotype. We showed that up-regulation of SPG20 expression, brought about by trisomy 13 in DLD1+13 and AF+13 cells, is sufficient for the cytokinesis failure phenotype. Overall, our study shows that aneuploidy can induce chromosome mis-segregation. Moreover, we identified a trisomy 13-specific mitotic phenotype that is driven by up-regulation of a gene encoded on the aneuploid chromosome. DOI: <http://dx.doi.org/10.7554/eLife.05068.001>

### Classification

- ☒ supporting 👍 2
- ☐ mentioning 👁 51
- ☒ disputing 👎 0

### Year Published



### Paper Sections

- ☒ Intro 4
- ☒ Results 1
- ☒ Methods 0
- ☒ Discussion 2
- ☒ Other sections 46

### 2 Citation Statements (2 Sources)

Q Context, author(s), tit...

1. 👍 supporting 👍  
Confidence: 93%

"...Compared to the diploid parental line, the frequencies of chromosome missegregation and micronuclei formation were significantly elevated in most PTA clones (Figure 2A) but not in the tetraploid line (Figure 2A). In agreement with previous work (Nicholson et al., 2015), the trisomic clones showed similar aberrations, albeit to a lesser extent (Supplemental Figure S2B). Furthermore, we observed an increase of structural aberrations in PTA lines and, consistent with earlier work (Kuznetsova et al., 2015; Passerini et al., 2016), also in trisomic clones (Figure 2B)...."

[Quantitative proteomic and phosphoproteomic comparison of human colon cancer DLD-1 cells differing in ploidy and chromosome stability](#) Viganó, et al. 2018 *MBio* Section: RESULTS  
[scite report](#)

2. 👍 supporting 👍  
Confidence: 82%

"...To independently confirm the observed chromosome instability, RPE +18+18 aneuploid cells were treated with dihydrocytochalasin B (DCB) to disrupt cytokinesis followed by FISH labelling using specific probes to identify chromosomes 13, 18 and 21 in the binucleated cells (Fig 2E and F). This method reveals the reciprocal distribution of labeled chromosomes between daughter nuclei immediately after chromosome segregation and can be applied to the analysis of several hundred cells in tandem [10]. As shown in Fig 2E and F, RPE +18+18 cells displayed a significant increase in chromosome mis-segregation rates, consistent with the results of our live-cell imaging analysis...."

[p53 induces senescence in the unstable progeny of aneuploid cells](#) Giam, et al. 2019 Section: Aneuploid cell lines display stable karyotypes despite chrom...  
[scite report](#)

Scite utilizes machine learning to extract and automatically classify citation statements from millions of scientific articles. To-date it has analyzed over 23 million full-text scientific articles and over 800 million citation statements. One can find all this information in the scite report. For an article it shows the citation context from other papers it was cited in. This enables anyone to quickly see the number of times it received a citation, the citations description, and whether its findings were supported, disputed, or simply mentioned. Moreover, through the scite report, you can search the citation snippets. In addition, you can filter based on article type (preprint, article, book, etc.), section where article appears (intro, results, methods, discussion, or other), and if the citation statement indicates that it provides supporting or disputing evidence to the cited paper.

With scite, you can easily see what dozens or even hundreds of papers have said about an article

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without having to manually search each of those articles to find the citation of interest. This is a huge time saver and allows you to digest and understand the literature better.

## How can scite and smart citations data help you do better research?

*(Using the scite browser extension to enhance your research workflows)*

In order to take advantage of Smart Citations, Scite has deployed various solutions to help researchers do better research. One solution that helps researchers enhance their workflows is the scite browser extension, available for [Chrome](#), [Firefox](#), and [Edge](#). The scite browser extension helps you see Smart Citation data anywhere you're working online. This includes Pubmed, Google Scholar, Google, Scopus, Web of Science, and nearly all major publishers' websites. You can also see the Smart Citation data in the reference sections of articles.

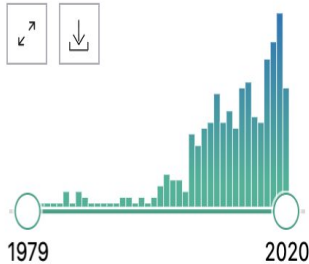
The badge, which displays the number of supporting, mentioning, and disputing citations can now be seen in these systems.

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288 results

RESULTS BY YEAR



TEXT AVAILABILITY

- ☐ Abstract
- ☐ Free full text
- ☐ Full text

ARTICLE ATTRIBUTE

- ☐ Associated data

ARTICLE TYPE

- ☐ Books and Documents

## 1 Chromosome Mis-segregation Generates Cell-Cycle-Arrested Cells with Complex Karyotypes that Are Eliminated by the Immune System.

Cite Santaguida S, Richardson A, Iyer DR, M'Saad O, Zasadil L, Knouse KA, Wong YL, Rhind N, Desai A, Amon A.

Share Dev Cell. 2017 Jun 19;41(6):638-651.e5. doi: 10.1016/j.devcel.2017.05.022.

PMID: 28633018 [Free PMC article.](#)

Aneuploidy, a state of karyotype imbalance, is a hallmark of cancer. Changes in **chromosome** copy number have been proposed to drive disease by modulating the dosage of cancer driver genes and by promoting cancer genome evolution. ...By investigating the immediate consequenc ...

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## 2 Short- and long-term effects of chromosome mis-segregation and aneuploidy.

Cite Santaguida S, Amon A.

Share Nat Rev Mol Cell Biol. 2015 Aug;16(8):473-85. doi: 10.1038/nrm4025.

PMID: 26204159 [Review.](#)

Dividing cells that experience **chromosome mis-segregation** generate aneuploid daughter cells, which contain an incorrect number of **chromosomes**. ...Recent work has provided insights into the cellular consequences of CIN and aneuploidy. **Chromosome** ...

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simple click takes you directly to the corresponding scite report. This means you can use whatever tool or system you want to find the research and scite to better analyze how it has been received in the literature. As one researcher said, [“it’s like reading scientific literature with x-ray vision.”](#)

## Keeping up with the literature

Because the literature is constantly changing, it’s important to be able to keep up with it. Scite not only helps you uncover and understand articles but allows you to stay on top of them using notifications. Next to each report title on Scite is the ability to subscribe to free notifications. If you enable notifications, you will receive emails on addition of new Smart Citations to the scite database.

What if you want to look at multiple articles at once? To facilitate this, scite has developed the ability to create [Custom Dashboards](#).

## Create Custom Dashboard

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Any dashboards you make will be saved and accessible directly from your user profile.

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Name\*

What should we call your dashboard?

Description\*

Tell us a little bit about the dashboard; what is it describing?

DOIs\*

DOIs entered manually can be comma separated, or new-line separated (if for example you are copying over an Excel column). Please ensure that only DOIs are provided here (i.e. no headers or additional data).

Custom dashboards aggregate information on any arbitrary set of DOIs. You can create them by manually entering a list, uploading a CSV file of DOIs, or syncing your reference library from Mendeley or Zotero.

This allows you to see which articles in your library have been supported or disputed. These dashboards, like individual articles, can also be configured. It allows you to receive notifications when

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new Smart Citations are discovered for any of its articles. Moreover, you can use custom dashboards to track a group of articles from a specific subject area, model system, or anything that you might be interested in.

## Using scite during the writing and review process

In addition to utilizing scite to better understand and discover published articles, scite can also help you with writing. Scite has [joined forces with the Reference Management tool Zotero](#) so that you can see Smart Citations as you're writing. This allows you to "scite before you cite", ensuring that you are building your research atop reliable literature.

In addition, scite also offers a [Reference Check](#) solution that allows you to upload your manuscript or any PDF you wish to check how its references have been cited, and to see if any have been retracted, withdrawn, corrected, or received some other editorial notice. This powerful system is an easy way to check the foundations of your paper before publication.

In conclusion, scite is a powerful new tool that will help you enhance your research in many different ways with an emphasis on veracity. To try it out, sign up at [scite.ai](https://scite.ai)

### Category

1. Manuscript Preparation
2. Publishing Research

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2021/01/12

### Author

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