

## Review article

# Publication of oral and video presentations from the Society of Gynecologic Oncology annual meeting over 11 years – What characteristics were important?

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## ABSTRACT

The goal of this study was to determine the characteristics associated with publication of oral and video presentations presented at the Society of Gynecologic Oncology annual meetings. Abstracts were reviewed using publication booklets from 2006 to 2016. PubMed and internet searches were used to determine publication status. Chi-squared test, Fisher's exact test, and logistic regression were used for statistical analyses.

Of 585 oral plenary sessions, 502 (85.8%) led to publications in peer-reviewed journals. The majority (75.7%) of presentations were clinical rather than translational (24.3%). Compared to single institution studies, multicenter presentations led to a higher publication rate (89.9% vs 80.5%;  $p = 0.001$ ). Randomized controlled trials and cohort studies had publication rates of over 90%, while chart reviews and translational research were published at a rate of 87.1% and 80%, respectively ( $p = 0.004$ ). 41.4% of all publications were in the specialty journal *Gynecologic Oncology*. Of 56 surgical videos, 23 (41.1%) advanced to publication in either peer-reviewed journals or as online videos: 32.1% were in print media, 5.4% were posted as accessible online videos (YouTube, Google Video, university websites). On multivariate analysis of oral presentations, multicenter studies (OR: 1.95; 95% CI: 1.15–3.31;  $p = 0.01$ ), cohort studies (OR: 3.13; 95% CI: 1.30–7.58;  $p = 0.01$ ), and international studies (OR: 4.02; 95% CI: 1.20–13.40;  $p = 0.02$ ) were most likely to be published.

Over 11 Society of Gynecologic Oncology annual meetings, >85% of oral plenary sessions led to peer-reviewed publication and 41% of surgical videos were published or accessible online. Multicenter, international, and cohort studies were more likely to be published.

## 1. Introduction

Scientific conferences are essential for the dissemination of novel research findings and the improvement of patient care. Plenary presentations represent the most important research findings identified annually by the society's program committee. The systematic peer-review of presented research is essential in order to enhance the quality of novel findings disseminated to healthcare practitioners. However, the publication rates and characteristics that lead to publication have not been well studied, particularly for surgical videos.

Publication rates for annual meeting plenary presentations in peer-reviewed journals vary across medical society conferences, ranging from 26.8% to 81.7% (Gerlach et al., 2017; Cohen et al., 2013). Several studies have examined factors associated with peer-reviewed publication from data presented at professional medical meetings. Javidan and colleagues found that larger sample sizes and positive results were predictive of publication success at the Society for Vascular Surgery annual meeting. In addition, Egloff et al identified multicenter involvement and randomized controlled trials as study characteristics associated with publication (Javidan et al., 2019; Egloff et al., 2017).

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However, these studies were conducted over shorter durations of less than 5 years and did not address factors such as international multi-center collaborations.

In a prior study of plenary presentations at the Society of Gynecologic Oncology (SGO) conferences, Cohen et al found that over 80% of presentations led to peer-reviewed publications. They also showed that multi-institutional studies and randomized controlled trials were more likely to be published (Cohen et al., 2013). This prior study did not evaluate surgical videos presentations and their publication rates in both traditional journals and online media outlets. These educational videos have become essential tools for training and highlight innovative techniques. Furthermore, their analysis lacked detailed information on such factors as research topics and had a short study period of only 6 years. In this current report, we performed an 11 year analysis of SGO annual meeting presentations, and expanded the analysis to evaluate a more comprehensive set of characteristics associated with publication of oral presentations and surgical videos.

## 2. Methods

Abstracts were reviewed from SGO annual meeting summaries between 2006 and 2016 (Gynecologic Oncology, 2015). Content from these abstracts were checked for subsequent publication as identified by PubMed and video streaming site searches. We electively ended our analysis in 2016 to allow for manuscript preparation, peer-review, and publication processes.

Pertinent abstract, author, and institution information were extracted. For oral abstracts, authorship information was gathered, including single vs. multi-institutional involvement in the research, and first author institutional affiliation information – academic status, presence of a 3 or 4-year gynecologic oncology fellowship program, international or US affiliation, and region in the United States (US) were noted. Additionally, research content (clinical vs. translational/basic science), year of presentation, study's sample size ( $\leq 20$ ,  $\leq 50$ ,  $\leq 100$ ,  $> 100$  patients), study type, type of findings (positive vs. negative), and type of plenary session were noted. Study types included chart review, randomized controlled trial, cohort study, translational research (including cost-effectiveness analyses), or other. We examined the topic that each individual abstract addressed – diagnostics, cancer genetics, surgery, robotically-assisted surgery, surgical outcomes, staging, lymph node mapping, chemotherapy clinical trials, immunotherapy, radiotherapy, and novel biologics (PARP inhibitors), social determinants of health, palliative care, and physician wellness. Tables included the five topics with the highest publication rates.

The examination of surgical videos included many abstract characteristics studied in the oral plenary analysis (year of presentation, US vs. international institutional affiliation, region of US of institution, institution type). In addition, we identified the type of cancer being addressed with the surgery depicted (ovarian, uterine, cervical, endometrial, vulvar, vaginal, fallopian tube, or recurrent) and whether the video abstract demonstrated resection or reconstructive surgery. We also identified abstracts conservative procedures (nerve-sparing, fertility preserving). There were no surgical videos presented at the SGO conferences taking place in 2006 and 2007.

A PubMed search of abstract titles, key words, and all combinations of author names was performed to determine whether plenary presentations subsequently contributed to peer-reviewed publication in journals. For abstracts resulting in published manuscripts, we determined the journal or website in which they appeared. For surgical videos, an additional Internet search using YouTube and Google Video services was conducted to determine online publication status. Only original articles with material directly corresponding to the plenary presentations were considered, while letters, editorials, and reviews were excluded. Chi-squared test and logistic regression were used for the statistical analysis of oral plenary session presentations, whereas the chi-squared test and Fisher's exact test were used to analyze surgical videos

results. Data analyses were conducted using SAS® Enterprise Guide 7.1 (SAS Institute Inc., Cary, NC, USA).

## 3. Results

Of the 585 abstracts, 502 (85.8%) resulted in an associated manuscript being published in peer-reviewed journals. The majority (75.7%) of presentations were clinical studies, with the more common topics on cancer genetics (23.8%), surgery (10.3%), and chemotherapeutic clinical trials (8.9%). Cohort, translational studies, and chart reviews comprised 34.5%, 25.6%, and 22.6% of presentations, while randomized clinical trials comprised 7.7%. The mean time from presentation to publication for all plenaries was 18.6 months. There were no observable changes in publication rates over time ( $p = 0.12$ ; data not shown). The detailed characteristics of oral presentations are depicted in Table 1.

Of 56 surgical videos presented over our study period, 28.6% demonstrated laparoscopic procedures and 25% depicted open surgery. Most (82.1%) of these surgical films showed radical resection procedures, while 3.6% were reconstructive surgeries (Fig. 1). Ovarian and cervical cancers were addressed by 48.2% of the procedures. Detailed characteristics of these video abstracts are shown in Table 2.

Both randomized controlled trials and cohort studies had publication rates of over 90% while chart reviews and translational research and were published at a rate of 87.1% and 80%, respectively ( $p = 0.004$ ; Fig. 2). The publication rate of chemotherapeutic clinical trials was 92% compared to 78.3% for studies related to surgery; however, the difference in rate of publication based on all topics were not different ( $p = 0.35$ ). Multicenter studies were more likely to be published compared to single institutions (89.9% vs. 80.5%;  $p = 0.001$ ). Studies with larger sample sizes were more likely to be published; 69% of studies examining fewer than 20 patients appeared in peer-reviewed journals, while 89.4% of those with sample sizes  $> 100$  patients were published ( $p = 0.001$ ). 88.1% of main plenaries advanced to publication, compared to 62.2% of express plenary sessions ( $p < 0.001$ ). Of note, there were no significant differences found in publication likelihood between studies presenting positive versus negative results over the time period assessed (Table 1).

The publication rate of the surgical videos appearing in peer-reviewed journals and/or online was 41.1%. More specifically, 32.1% were identified in print media, 5.4% were posted as accessible online videos (YouTube, Google Video, university websites, or the SGOs own conference video streaming service), and 3.6% were in both. 50% of surgical videos on reconstruction were published, compared to 45.7% on surgical resection ( $p = 0.14$ ). Video presentations on uterine (55.6%) and cervical cancer (53.9%) had a trend toward higher likelihood of publication than those showing ovarian cancer procedures (14.3%) ( $p = 0.24$ ).

We found that *Gynecologic Oncology* was the journal that most frequently published papers based on SGO plenary presentations (41.4% of studies). Only 25.7% of total published abstract content appeared in the five next most frequent publishers of SGO abstract content from 2006 to 2016 (*Obstetrics and Gynecology*, *Cancer*, *Journal of Clinical Oncology*, *International Journal of Gynecological Cancer*, *Clinical Cancer Research*).

On multivariate analysis for oral plenary sessions, we found that studies with authors from multiple institutions were more likely to be published than single center research (OR: 1.95; 95% CI: 1.15–3.31;  $p = 0.01$ ). Cohort studies were more likely to be published than chart reviews, randomized controlled trials, translational research, and other study types (OR: 3.13; 95% CI: 1.30–7.58;  $p = 0.01$ ). Studies with authors working at institutions outside of the US were more likely to successfully publish material from their SGO abstracts than were US-based researchers (OR: 4.02; 95% CI: 1.20–13.40;  $p = 0.02$ ). Abstracts presented as main (OR: 2.54; 95% CI: 1.19–5.97;  $p = 0.02$ ) or focused plenary sessions (OR: 2.85; 95% CI: 1.32–6.92;  $p = 0.01$ ) were most likely to be published (Table 3). There were no significant differences found in publication rate between research presenting positive results

**Table 1**  
Characteristics of Oral Plenary Session Abstracts.

Factors	Total (N = 585)	Published (N = 502)	Not Published (N = 83)	P Value
<b>Content</b>				0.06
Clinical	443 (75.7%)	387 (87.4%)	56 (12.6%)	
Translational/basic science	142 (24.3%)	115 (81.0%)	27 (19.0%)	
<b>Topics</b>				0.35
Palliative care	19 (3.3%)	17 (89.5%)	2 (10.5%)	
Immunotherapy	8 (1.4%)	7 (87.5%)	1 (12.5%)	
Chemotherapy clinical trials	50 (8.9%)	46 (92.0%)	4 (8.0%)	
Surgery	60 (10.3%)	47 (78.3%)	13 (21.7%)	
Cancer genetics	139 (23.8%)	116 (83.5%)	23 (16.6%)	
Other <sup>a</sup>	309 (52.8%)	269 (87.1%)	40 (12.9%)	
<b>Center Type</b>				0.001
Single	257 (43.9%)	207 (80.5%)	50 (19.5%)	
Multi-center	328 (56.1%)	295 (89.9%)	33 (10.1%)	
<b>Study Size</b>				0.001
≤ 20 patients	29 (5.0%)	20 (69.0%)	9 (31.0%)	
≤ 50 patients	64 (10.9%)	51 (79.7%)	13 (20.3%)	
≤ 100 patients	62 (10.6%)	58 (93.6%)	4 (6.5%)	
> 100 patients	301 (51.5%)	269 (89.4%)	32 (10.6%)	
Not Applicable <sup>b</sup>	129 (22.1%)	104 (80.6%)	25 (19.4%)	
<b>Findings</b>				0.33
Positive	559 (95.6%)	478 (85.5%)	81 (14.5%)	
Negative	26 (4.4%)	24 (92.3%)	2 (7.7%)	
<b>University Affiliation of First Author</b>				0.8
Yes <sup>c</sup>	526 (89.9%)	452 (85.9%)	74 (14.1%)	
No <sup>d</sup>	59 (10.1%)	50 (84.8%)	9 (15.3%)	
<b>Fellowship</b>				0.15
Yes-3 years	313 (53.5%)	276 (88.2%)	37 (11.8%)	
Yes-4 Years	151 (25.8%)	123 (81.5%)	28 (18.5%)	
No	121 (20.7%)	103 (85.1%)	18 (14.9%)	
<b>US Region<sup>e</sup></b>				0.048
West	35 (6.7%)	27 (77.1%)	8 (22.9%)	
South	51 (9.8%)	38 (74.5%)	13 (25.5%)	
East	111 (21.2%)	93 (83.8%)	18 (16.2%)	
Midwest	41 (7.8%)	34 (82.9%)	7 (17.1%)	
Other US location, multiple centers	285 (54.5%)	253 (88.8%)	32 (11.2%)	
<b>US vs. International Affiliation of First Author</b>				0.14
US	523 (89.4%)	445 (85.1%)	78 (14.9%)	
International	62 (10.6%)	57 (91.9%)	5 (8.1%)	
<b>Study Type</b>				0.004
Chart review	132 (22.6%)	115 (87.1%)	17 (12.9%)	

**Table 1 (continued)**

Factors	Total (N = 585)	Published (N = 502)	Not Published (N = 83)	P Value
Randomized controlled trial	45 (7.7%)	41 (91.1%)	4 (8.9%)	
Cohort	202 (34.5%)	184 (91.1%)	18 (8.9%)	
Translational research	150 (25.6%)	120 (80.0%)	30 (20.0%)	
Other <sup>f</sup>	56 (9.6%)	42 (75.0%)	14 (25.0%)	
<b>Plenary Session Type</b>				less than 0.001
Main	310 (53.0%)	273 (88.1%)	37 (11.9%)	
Focused	230 (39.3%)	201 (87.4%)	29 (12.6%)	
Express	45 (7.7%)	28 (62.2%)	17 (37.8%)	
<b>Year of Meeting</b>				0.12
2006	59 (10.1%)	56 (94.9%)	3 (5.1%)	
2007	66 (11.3%)	55 (83.3%)	11 (16.7%)	
2008	58 (9.9%)	53 (91.4%)	5 (8.6%)	
2009	60 (10.3%)	51 (85.0%)	9 (15.0%)	
2010	52 (8.9%)	47 (90.4%)	5 (9.6%)	
2011	40 (6.8%)	36 (90.0%)	4 (10.0%)	
2012	48 (8.2%)	40 (83.3%)	8 (16.7%)	
2013	46 (7.9%)	37 (80.4%)	9 (19.6%)	
2014	53 (9.1%)	44 (83.0%)	9 (17.0%)	
2015	54 (9.2%)	40 (74.1%)	14 (25.9%)	
2016	49 (8.4%)	43 (87.8%)	6 (12.2%)	

Data are in row percent and may not add up to 100% due to rounding.

<sup>a</sup> Other topics include clinical trials, social determinants of health, access to care and cost effectiveness studies, cancer diagnostic guidelines, diseases secondary to cancer, videos, medications with other purposes, chemotherapy, robotically-assisted surgery, intrauterine devices, radiotherapy, surgical outcomes, staging and lymph node mapping, GTPase inhibitors, physician wellness, HPV, PARP inhibitors, Neo-adjuvant treatment, hormonal therapy, cancer predispositions, and imaging.

<sup>b</sup> Not applicable for indicating study size since the content is basic science.

<sup>c</sup> Academic centers with medical schools.

<sup>d</sup> Hospital and private affiliations.

<sup>e</sup> Out of those with abstracts from within the US (N = 523).

<sup>f</sup> Other study type includes cohort, survey, meta-analysis, and decision analysis model.

and research presenting negative results over the time period assessed.

#### 4. Discussion

The SGO Annual Meeting provides physicians and researchers with the opportunity to share important findings within the field of gynecologic oncology with their colleagues. However, not all plenary sessions presented result in publication in peer-reviewed journals. A report evaluated the factors associated with publication of oral presentations, but this study did not include a separate delineation of research topics in their analysis, nor did it examine surgical video presentations (Cohen et al., 2013). In this current report of SGO meeting presentations during the last 11 years, we showed that over 40% of surgical videos were accessible online and 86% of oral plenary presentations were published in peer-reviewed journals, with main plenaries, cohort studies,

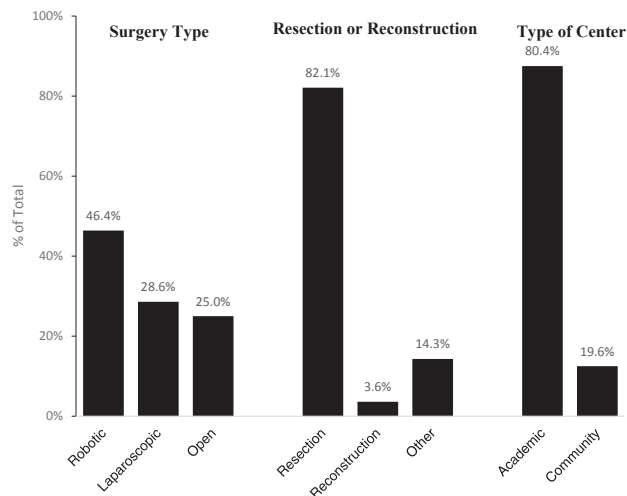


Fig. 1. Surgical Video Characteristics.

**Table 2**  
Characteristics of Surgical Video Abstracts and Rates of Publication.

Factors	Overall (N = 56)	Published (N = 23)	Not Published (N = 33)	P Value
<b>US vs International</b>				0.39
US	40 (71.4%)	18 (45.0%)	22 (55.0%)	
International	16 (28.6%)	5 (31.3%)	11 (68.8%)	
<b>Region of US</b>				0.78
West	11 (19.6%)	6 (54.6%)	5 (45.5%)	
South	6 (10.7%)	3 (50.0%)	3 (50.0%)	
East	18 (32.1%)	7 (38.9%)	11 (61.1%)	
Midwest	5 (8.9%)	3 (40.0%)	2 (60.0%)	
Outside of US	16 (28.6%)	5 (31.3%)	11 (68.8%)	
<b>Type of center</b>				0.69
Academic	49 (87.5%)	21 (42.9%)	28 (57.1%)	
Community	7 (12.5%)	2 (28.6%)	5 (71.4%)	
<b>Cancer type</b>				0.24
Ovary	14 (25.0%)	2 (14.3%)	12 (84.7%)	
Uterus	9 (16.1%)	5 (55.6%)	4 (44.4%)	
Cervix	13 (23.2%)	7 (53.9%)	6 (46.2%)	
Endometrium	5 (8.9%)	2 (40.0%)	3 (60.0%)	
Vulvar	2 (3.6%)	1 (50.0%)	1 (50.0%)	
Vaginal	1 (1.8%)	0 (0.0%)	1 (100.0%)	
Fallopian tubes	1 (1.8%)	1 (100.0%)	0 (0.0%)	
Recurrent	11 (19.6%)	5 (45.5%)	6 (54.6%)	
<b>Surgery Type</b>				0.54
Robotic surgery	26 (46.4%)	12 (46.2%)	14 (53.9%)	
Laparoscopic surgery	16 (28.6%)	7 (43.8%)	9 (56.3%)	
Open surgery	14 (25.0%)	4 (28.6%)	10 (71.4%)	
<b>Resection or reconstruction</b>				0.14
Resection	46 (82.1%)	21 (45.7%)	25 (54.4%)	
Reconstruction	2 (3.6%)	1 (50.0%)	1 (50.0%)	
Other	8 (14.3%)	1 (12.5%)	7 (87.5%)	
<b>Conservative surgeries</b>				0.79
Nerve-sparing	5 (8.9%)	2 (40.0%)	3 (60.0%)	
Fertility preserving	1 (1.8%)	1 (100.0%)	0 (0.0%)	
Other	50 (89.3%)	20 (40.0%)	30 (60.0%)	

Data are in row percent and may not add up to 100% due to rounding.

international research, and multicenter studies more likely to be published.

The publication rate of manuscripts resulting from oral plenary session abstracts from 2006 to 2016 at the SGO annual meeting was 85.8%. Publication rates at the meetings of other medical societies varied widely; American College of Gastroenterology’s (ACG) annual meeting, for instance, had a publication rate of 55.6% for oral presentations, and the Canadian Association of Radiologists saw only 28%

of abstracts advanced to publication (Gandhi et al., 2016; Dressler and Leswick, 2015). At other subspecialty society meetings, however, a higher percentage of oral plenaries advanced to publication (Cheng et al., 2017; Bowers et al., 2017). High publication rates may in part be due to the presence of subspecialty journals (Cohen et al., 2013; Bowers et al., 2017). Between 2000 and 2005, and during our study period from 2006 to 2016, SGO annual meeting abstracts most frequently appeared as manuscripts in *Gynecologic Oncology* (Cohen et al., 2013). Furthermore, conferences that are part of smaller subspecialties may experience a greater failure to publish research presented (Cheng et al., 2017). Publication success may also result from a conference’s particular set of selection criteria – a large number of abstract submissions to a conference with less availability to present data, for instance, create a highly competitive and rigorous selection process. This could result in presentations better suited for peer-reviewed publication, and as a result, a higher publication rate at a particular conference. In addition, the subspecialty of gynecologic oncology involves screening, diagnosis, surgery, and medical, radiation, and immunotherapy. The field’s breadth allows for submission to journals across multiple disciplines to publish findings. In our study, we found that *Gynecologic Oncology* was the journal with the most publications from content presented at the SGO annual meeting. The SGO conference’s relatively high publication rate could be due in part to the presence of a peer-reviewed subspecialty journal available to publish material from the abstracts accepted (Cohen et al., 2013).

Previous literature has examined publication bias against studies with negative findings, a phenomenon that precludes medical innovation progress (Jooper et al., 2012). Failing to disseminate negative findings could also waste valuable funds allocated to novel research as authors attempt work they are unaware has already been done (Jooper et al., 2012). Studies reporting negative results are cited less frequently, and little funding is allocated for such research (Mlinarić et al., 2017). As a result, authors often lack incentive to commit to the pursuit of publishing research with negative results (Mlinarić et al., 2017). Only 4.4% of all studies presented at the SGO Annual Meetings over the last 11 years had negative findings, suggesting the bias against negative findings may extend to conference selection committees in addition to authors and journal reviewers. Our results, however, demonstrated no significant difference between the publication rates of studies reporting positive results and studies reporting negative results. Additional efforts are needed to ensure that authors are incentivized to submit their work to meetings and journals, even if the results are negative or unexpected.

In our multivariate analysis of oral plenary sessions, we found that studies by international authors were more likely to advance to publication in peer-reviewed journals than those with authors from the US. In contrast, a prior study found that research from the US had a higher rate of publication at local conferences. The authors explained that international authors may be more likely to misunderstand the medical specialty addressed at a US conference, and therefore inappropriately submit their work. This would lead to more rejections of international abstracts (Kuczmarski et al., 2015). On the other hand, a prior report regarding cardiovascular disease research showed that international collaboration has been increasing, especially in the European Union. The research and publication from these cooperative groups can lead to greater citation impact (Gal et al., 2017). Pertaining to gynecologic oncology, international organizations such as The European Organization for Research and Treatment of Cancer (EORTC) and the International Collaborative Ovarian Neoplasm (ICON) studies have led clinical trials that have resulted in numerous publications that have changed the standard of care in uterine and ovarian cancer patients (Perren et al., 2012; Reed et al., 2008; Vergote et al., 2010). Other studies have also shown that multi-national clinical trials allow for rapid subject enrollment and study completion. More importantly, the more diverse patient population will enhance the generalizability of the results, conserve research resources, and improve access of novel therapies internationally (Minisman et al., 2012).

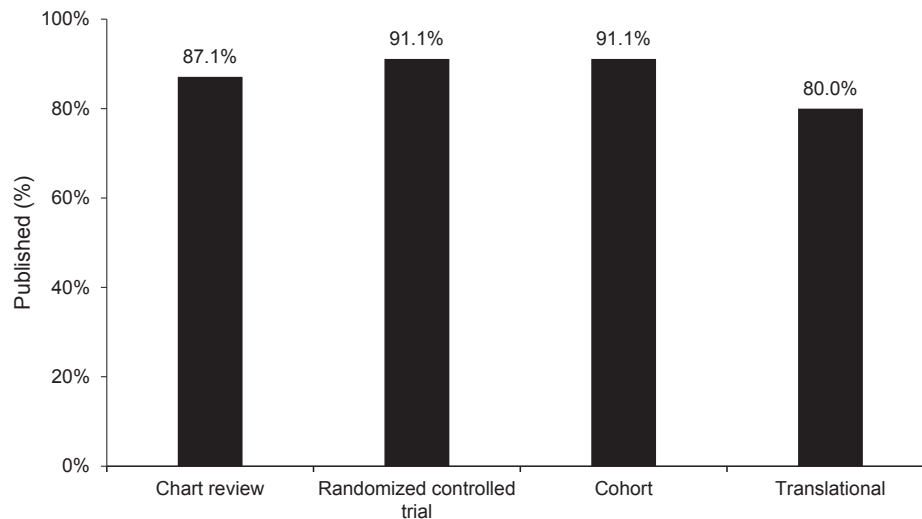


Fig. 2. Publication Rate Based on Type of Study (p = 0.004).

**Table 3**  
Multivariate Logistic Regression Analysis of Publication Rate for Oral Plenary Session Abstracts.

Factors	Odds Ratio	95% Confidence Interval	P Value
<b>Content</b>			
Translational/basic science <sup>a</sup>	1		
Clinical	0.54	0.07–3.85	0.53
<b>Center Type</b>			
Single center <sup>a</sup>	1		
Multicenter	1.95	1.15–3.31	0.01
<b>Study Size</b>			
Not applicable b/c of basic science <sup>a,b</sup>	1		
≤ 20 patients	0.72	0.12–4.22	0.72
≤ 50 patients	0.60	0.12–3.06	0.54
≤ 100 patients	2.45	0.40–15.20	0.33
> 100 patients	1.49	0.32–6.98	0.61
<b>Findings</b>			
Negative <sup>a</sup>	1		
Positive	0.84	0.19–3.88	0.82
<b>Fellowship</b>			
No <sup>a</sup>	1		
Yes-3 years	2.08	0.99–4.35	0.05
Yes-4 Years	1.46	0.66–3.23	0.35
<b>US vs International Affiliation of First Author</b>			
US <sup>a</sup>	1		
International	4.02	1.20–13.40	0.02
<b>Study Type</b>			
Other <sup>a,c</sup>	1		
Chart review	1.87	0.76–4.59	0.17
Randomized controlled trial	2.19	0.59–8.07	0.24
Cohort	3.13	1.30–7.58	0.01
Translational Research	0.82	0.18–3.83	0.80
<b>Plenary Session Type</b>			
Express <sup>a</sup>	1		
Main	2.54	1.19–5.97	0.02
Focused	2.85	1.32–6.92	0.01

<sup>a</sup> Reference Type.

<sup>b</sup> Not applicable for indicating study size since the content is basic science.

<sup>c</sup> Other study type includes cohort, survey, meta-analysis, and decision analysis model.

In our analysis, we found that only 41% of surgical videos advanced to publication in either journals or on internet video streaming platforms. This could be due to the fact that many surgical videos are case series or selected surgical procedures of individual patients. Journals tend to accept fewer case reports than they do studies examining larger

populations (Rison et al., 2017; Scherer et al., 2015). Although it may be difficult for surgical videos to advance to publication in journals, making video abstracts available on internet streaming websites would improve public access to this information otherwise limited to conference attendees. We found that only 5.4% of them were available online. While an existing platform provided by the SGO is intended to make conference surgical videos available to the public, this platform requires login credentials and membership through SGO (Society of Gynecologic Oncology Online Events by Peach New Media: Peach New Media). Further development of educational platforms that are peer-reviewed may be warranted to ensure surgical videos are available for trainees and the broader medical community.

There are several limitations of this report, several of which were discussed in a previous study (Cohen et al., 2013). First, the results may underrepresent the actual publication rate of SGO plenary sessions. Many published studies have different authors and titles than those specified in the abstracts that preceded them. The authors of the present study searched for title key words and all author name combinations, but it remains possible that certain manuscripts were missed. We also did not include manuscripts written in foreign languages, which may have led to a higher reported publication rate for this conference that included many international submissions. This study also depended on the authors' judgement in order to identify such characteristics as oral plenary study type and topic and video abstract surgical field as objectively as possible. It is possible, however, that other researchers would have made these categorizations differently. Furthermore, as discussed in a previous publication, the authors of unpublished data were not surveyed, depriving this study of additional insight into factors associated with lack of publication (Cohen et al., 2013). This study looked only at plenary presentations and did not include an examination of the publication trends in posters at the SGO Annual Meetings. Nevertheless, this is the only study that evaluated the characteristics of surgical videos associated with publication.

The vast majority of oral plenary sessions at the SGO Annual Meetings advanced to publication in peer-reviewed journals. According to this analysis, main plenaries, cohort studies, and studies completed by international authors were most likely to be published. This study aims to improve researchers' understanding of the research qualities that maximize publication success and examines the evolving nature of the SGO Annual Meeting. Over time, it will be important to continue to study medical meetings to enhance the dissemination of new research findings, and to draw attention to potential conference and publication biases.

## Declaration of Competing Interest

The authors declared the following potential conflict of interest with respect to the research, authorship, and/or publication of this article: John K. Chan is an honoraria speaker/consultant for: AbbVie, Acerta, Aravive, AstraZeneca, Clovis, Eisai, GlaxoSmithKline, Merck, and Roche. None of the other co-authors have conflicts of interest.

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## Author contribution

The concept for this manuscript was conceived by Dr. John K. Chan and Dr. Joshua G. Cohen. Anthony Milki collected data and wrote the manuscript, Dr. Daniel S. Kapp analyzed data and wrote the manuscript, and Amandeep Kaur Mann conducted the data analysis.

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