



AGSMO

Jahreskongress 2019

Berlin, 15. März 2019

# Digitalisierung in der Medizin: Mehrwert für die Supportivtherapie?

DR. MED. FRIEDRICH OVERKAMP  
[WWW.ONCOCONSULT.HAMBURG](http://WWW.ONCOCONSULT.HAMBURG)  
[WWW.ONKOWISSEN.DE](http://WWW.ONKOWISSEN.DE)

# Offenlegung Interessenskonflikte Dr. Friedrich Overkamp

## 1. Anstellungsverhältnis oder Führungsposition

GF OncoConsult.Hamburg GmbH, GF onkowissen.de GmbH

## 2. Beratungs- bzw. Gutachtertätigkeit

Berater Tätigkeiten incl. AdBoards für Amgen, Bayer, BMS, Boehringer, Cellex, ClinSol, Gilead, Hexal, iomedico, MSD, Novartis, Riemser, Roche, Tesaro, Teva

## 3. Besitz von Geschäftsanteilen, Aktien oder Fonds

Nein

## 4. Patent, Urheberrecht, Verkaufslizenz

Nein

## 5. Honorare

Vorträge und Moderationen: Amgen, AstraZeneca, Bayer, BMS, Boehringer, Chugai, Celgene, Eisai, Gilead, iomedico, Ipsen, Janssen-Cilag, Merck, MSD, Novartis, Novonordisc, Riemser, Servier, Shire

## 6. Finanzierung wissenschaftlicher Untersuchungen

Nein

## 7. Andere finanzielle Beziehungen

Nein

## 8. Immaterielle Interessenkonflikte

Nein

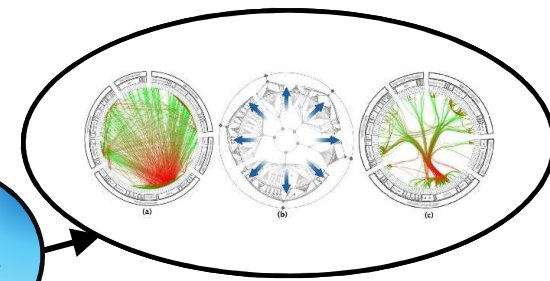
# Digital Healthcare

Disease Surveillance & Treatment Optimization via SmartWatches & Mobile Apps



- Hospital Information System
- Clinical Communication System
- Electronic Patient File

Treatment Optimization & Biomarker Discovery via Big Data Analysis

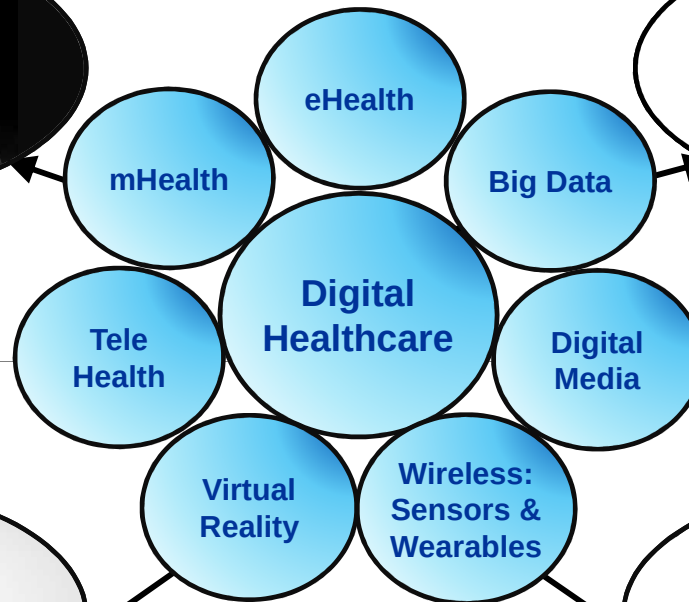


- TeleHealth-mediated Patient Visits
- Physician-Patient Communication
- Virtual Interdisciplinary Tumor Board

- Disease Awareness Portals
- Patient Communities
- Innovative Communication Channels
- Social Media Medical



Drug Discovery via Virtual & Augmented Reality Simulation



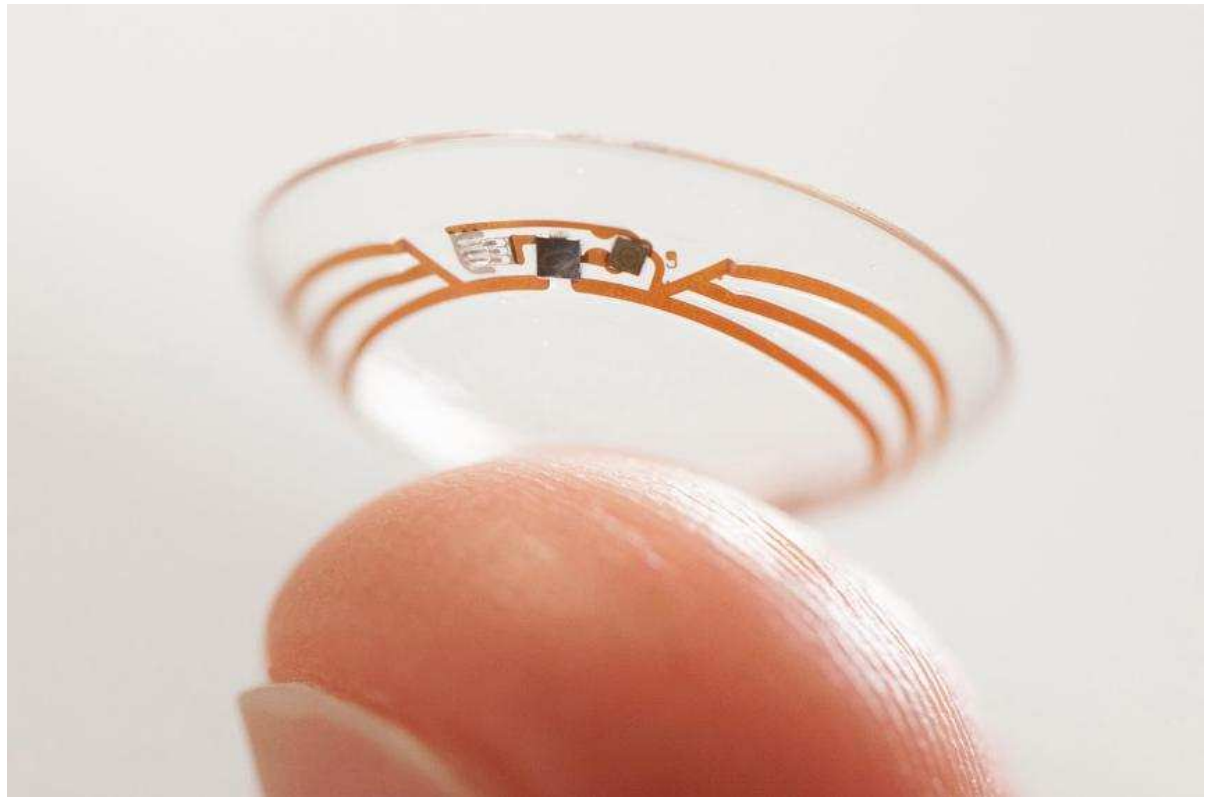
Wireless Sensors, Body-In-Sensors & Microchips for Disease Prevention & Control

# smart eye lens

Rasante Fortschritte der  
Digitalisierung in der Diabetologie

Google & Novartis

Drahtlose Kommunikation der  
Smarten Linse mit Insulinpumpe  
über eine App



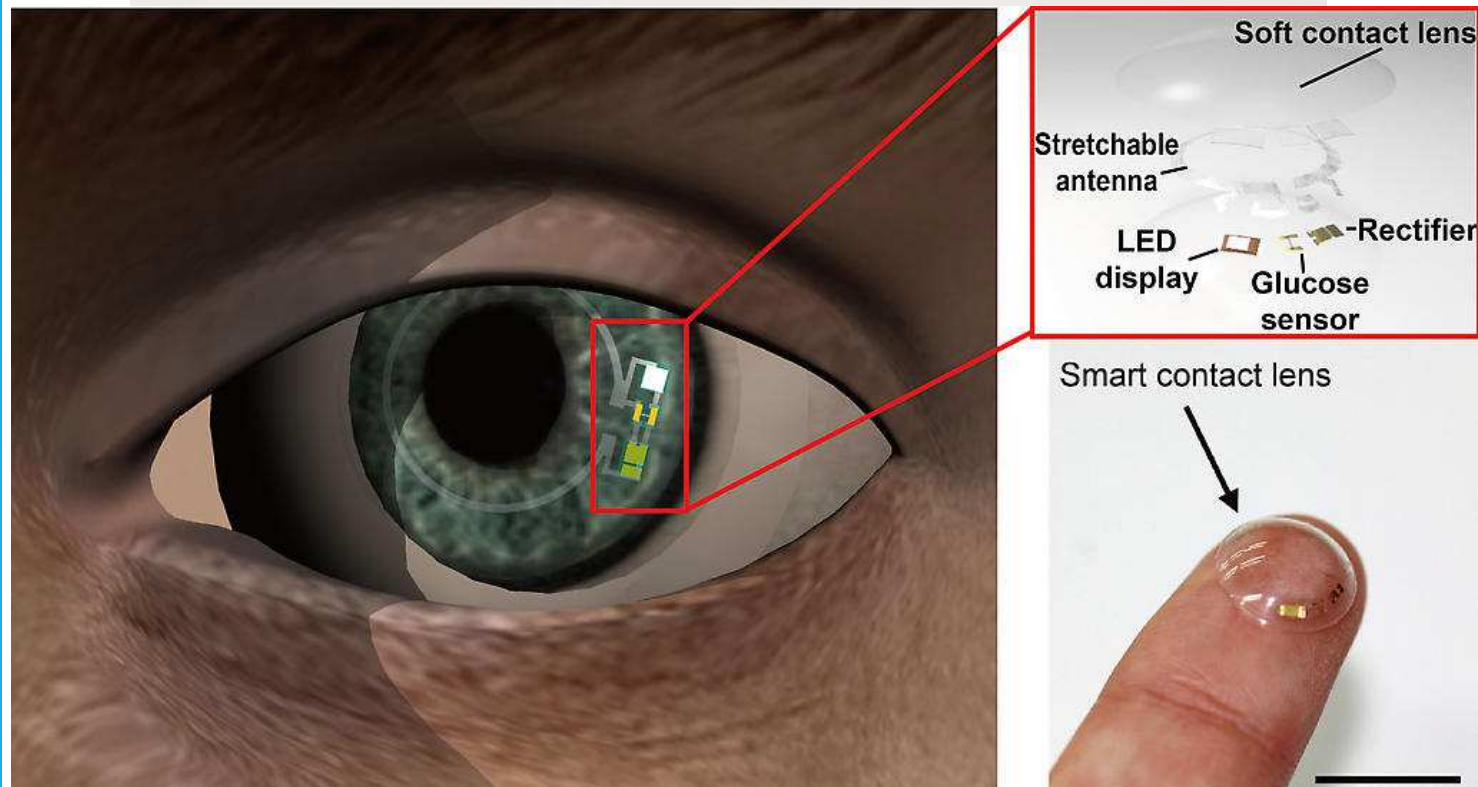
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über eine App

2018; doi: [10.1126/sciadv.aap9841](https://doi.org/10.1126/sciadv.aap9841)



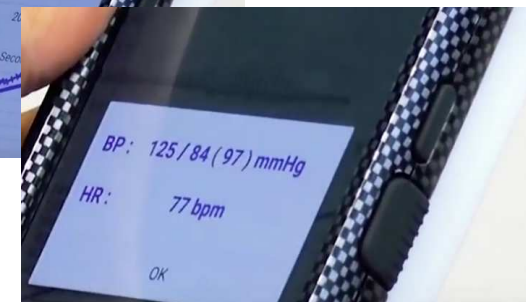
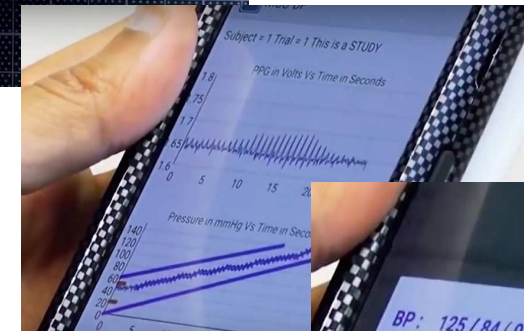
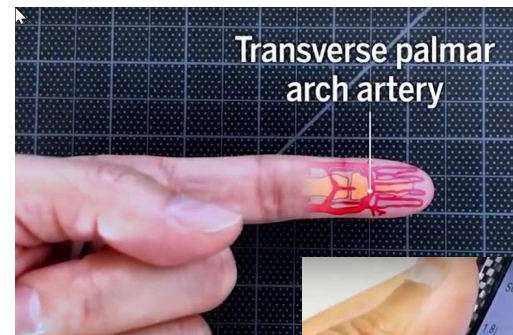


smart tablet

„Bin im Magen“



# RR, Puls



A. Chandrasekhar Science translational Med. (2018; 10: eaap8674)

# EKG

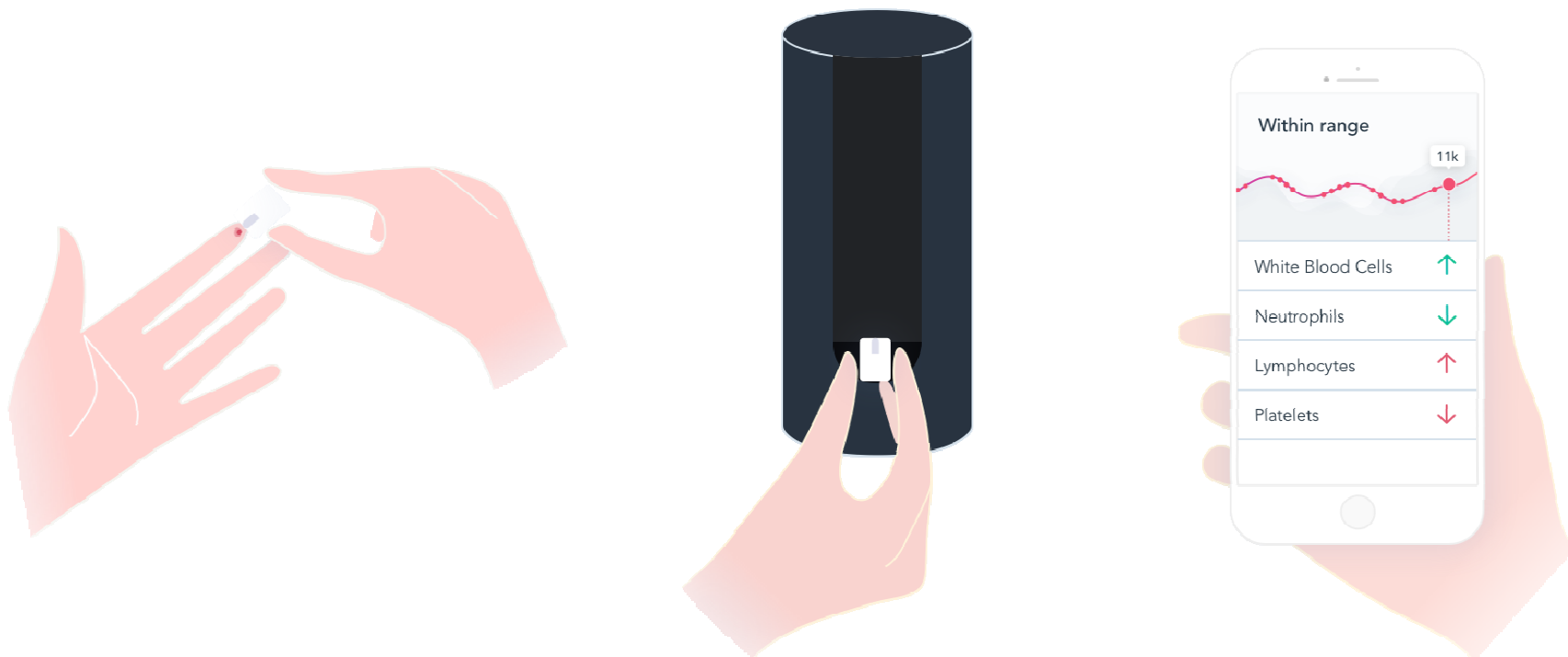
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# Blutbild

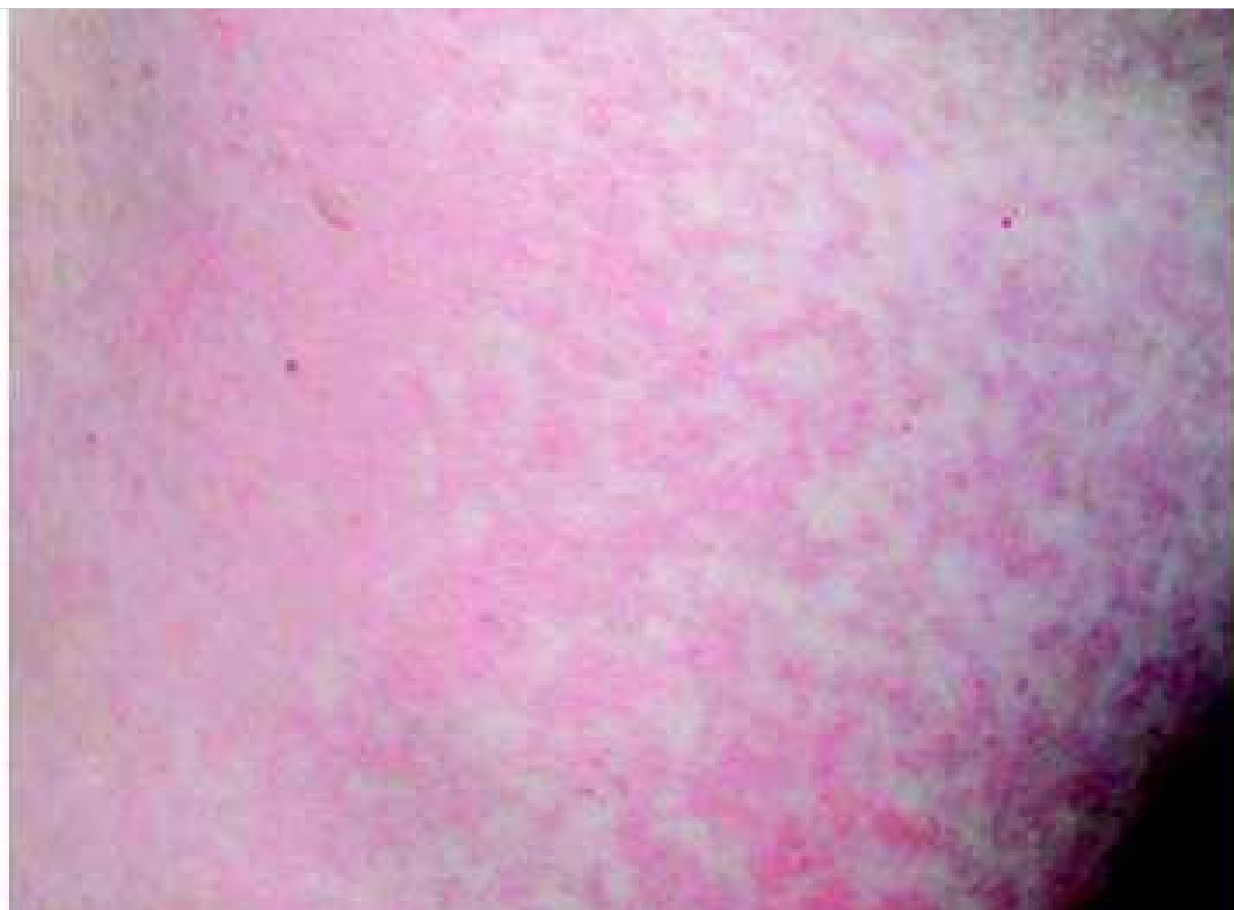
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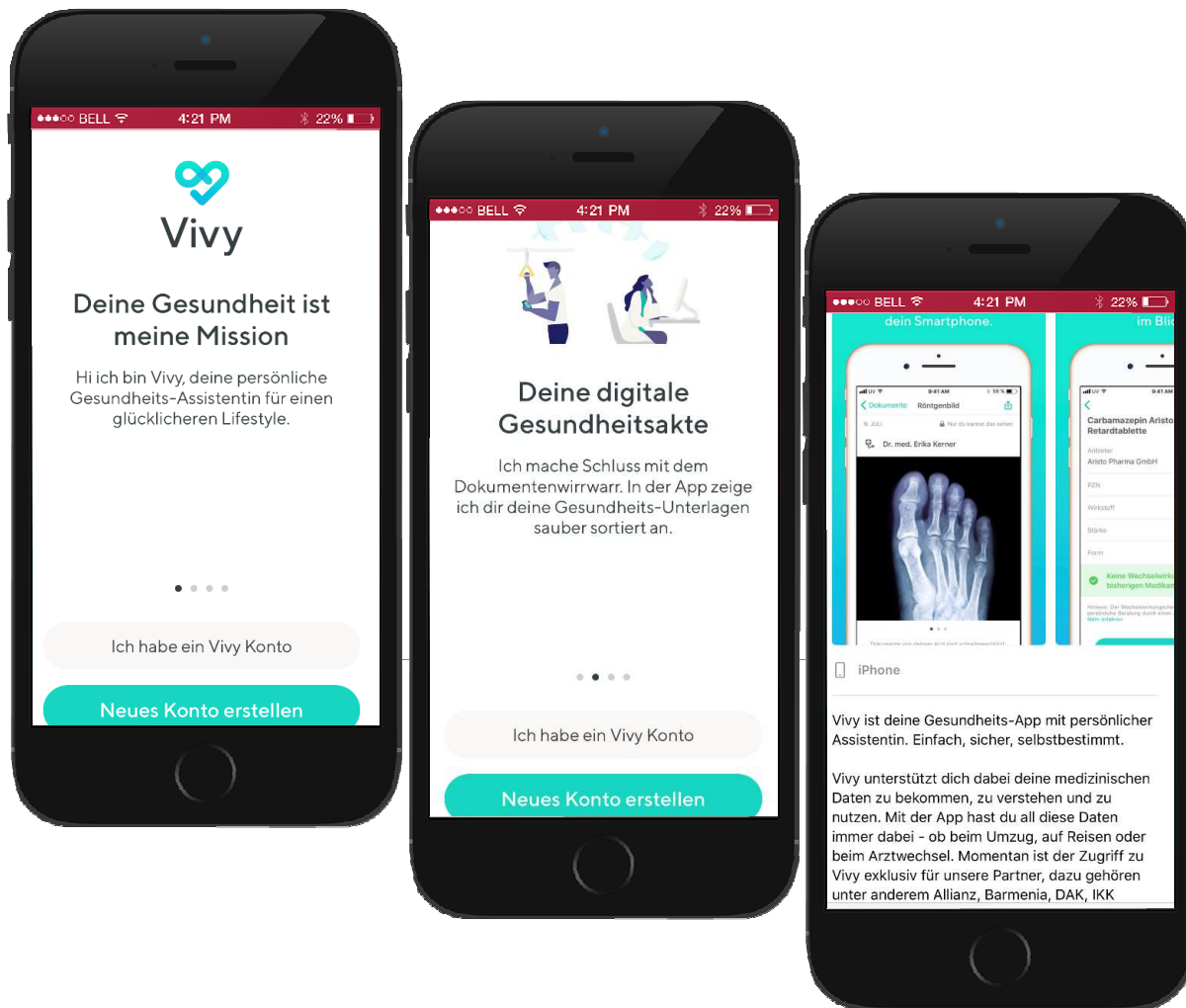
# 24 Mio Hautkrankheiten pro Jahr in Deutschland diagnostiziert

90 % könnten durch Betrachten eines digitalen Bildes erkannt, davon 70 % theoretisch ohne Arztbesuch therapiert werden



## Immunvermittelte Dermatitis unter Checkpointinhibitor? DD?

90 % könnten durch Betrachten eines digitalen Bildes erkannt, davon 70 % theoretisch ohne Arztbesuch therapiert werden



# ASCO 2017 LBA2

The screenshot shows a web browser window displaying the ASCO 2017 website. The page features the ASCO 2017 logo with the tagline 'Making a Difference in Cancer Care WITH YOU' and the text 'ASCO DAILY NEWS'. A search bar is located below the header. The main article is titled 'Online Tool for Reporting Symptoms Extends Survival' and is dated 'JUNE 4, 2017'. The article text describes a study by Dr. Ethan M. Basch, MD, MSc, FASCO, from The University of North Carolina at Chapel Hill, presented at the Plenary Session on June 4. The study (Abstract LBA2) found that the use of a web-based system for reporting symptoms was associated with improved quality of life (QOL) and longer overall survival (OS) in a randomized single-center trial. A photo of Dr. Basch at a podium is included. To the right of the article, there are two dropdown menus for 'Category' and 'Topic', both set to '- Any -'. Below these are two additional article teasers: 'Follow-Up of RESONATE Trial Supports Survival Benefits of Ibrutinib for Previously Treated CLL' and 'Subgroup Analysis of CheckMate 141 Supports Nivolumab for Platinum-Refractory Head and Neck Cancer'. At the bottom right, a partial headline for 'ALEX Phase III Trial Suggests Alectinib' is visible. The browser's address bar shows the URL 'http://am.asco.org/online-tool-reporting-symptoms-'. The Windows taskbar at the bottom indicates the date is 03.07.2017 and the time is 20:40.

2017  
**ASCO**  
ANNUAL MEETING  
Making a Difference in Cancer Care WITH YOU

ASCO DAILY NEWS

Online Tool for Reporting Symptoms Extends Survival

JUNE 4, 2017

The use of a web-based system that allowed patients to report symptoms to their clinicians remotely was associated with benefits including improved quality of life (QOL) and longer overall survival (OS), a randomized single-center trial found.

Ethan M. Basch, MD, MSc, FASCO, of The University of North Carolina at Chapel Hill, presented the findings of the study (Abstract LBA2) at the Plenary Session on June 4. "This approach should be considered for inclusion as a part of standard symptom management," Dr. Basch said. The results of the study were published in the *Journal of the American Medical Association* simultaneously with the presentation.

Symptoms are common in advanced cancer, and symptom management is a cornerstone of oncology practice to alleviate suffering and avoid downstream complications. However, numerous hurdles inhibit patient reporting of symptoms, and previous research has shown that up to half of symptoms are not reported to clinicians, Dr. Basch said. Research has also shown that systemic

Dr. Ethan M. Basch presents LBA2.

Category  
- Any -

Topic  
- Any -

Follow-Up of RESONATE Trial Supports Survival Benefits of Ibrutinib for Previously Treated CLL

Subgroup Analysis of CheckMate 141 Supports Nivolumab for Platinum-Refractory Head and Neck Cancer

ALEX Phase III Trial Suggests Alectinib



# Study Design

Patients receiving chemotherapy for metastatic breast, lung, GU, GYN cancer at MSKCC

R A N D O M I Z E

## INTERVENTION ARM

Self-report 12 common symptoms

- Prior to / between visits, by web
- Weekly email reminders to patients
- Alerts to nurses (by email)
- Reports to oncologists (at visits)

## CONTROL ARM

“Standard” symptom monitoring

## Outcomes

- QOL
- ER visits
- Survival

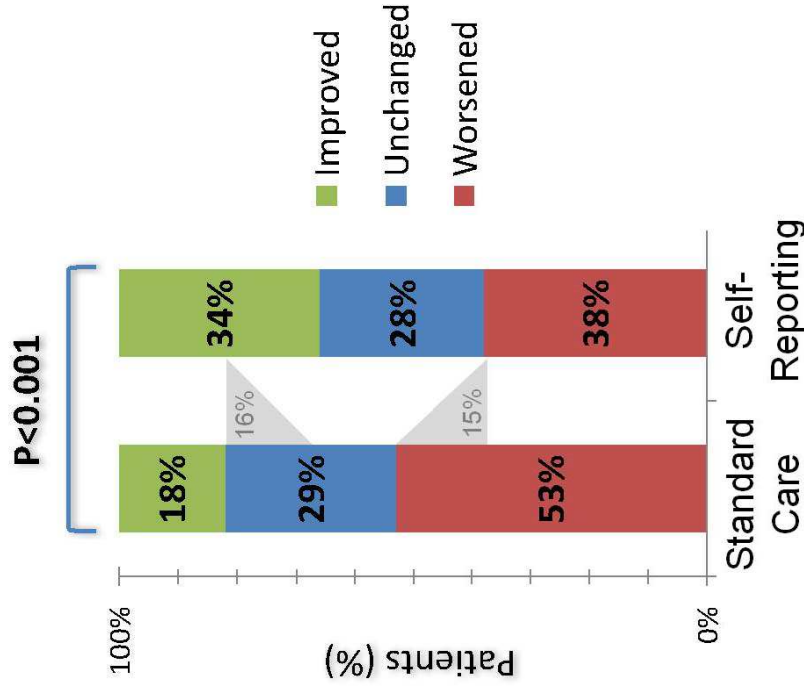
*Stratified by level of prior computer use  
Randomized 2:1 for those w/o prior use*

*Treatment discontinuation,  
withdrawal, hospice, death*

# Quality of Life

- Assessed at 6 months, compared to baseline
- Compared to standard care, 31% more patients in the self-reporting arm experienced QOL benefits ( $P<0.001$ )

Basch: *J Clin Oncol* 2016;34:557-565



PRESENTED AT:

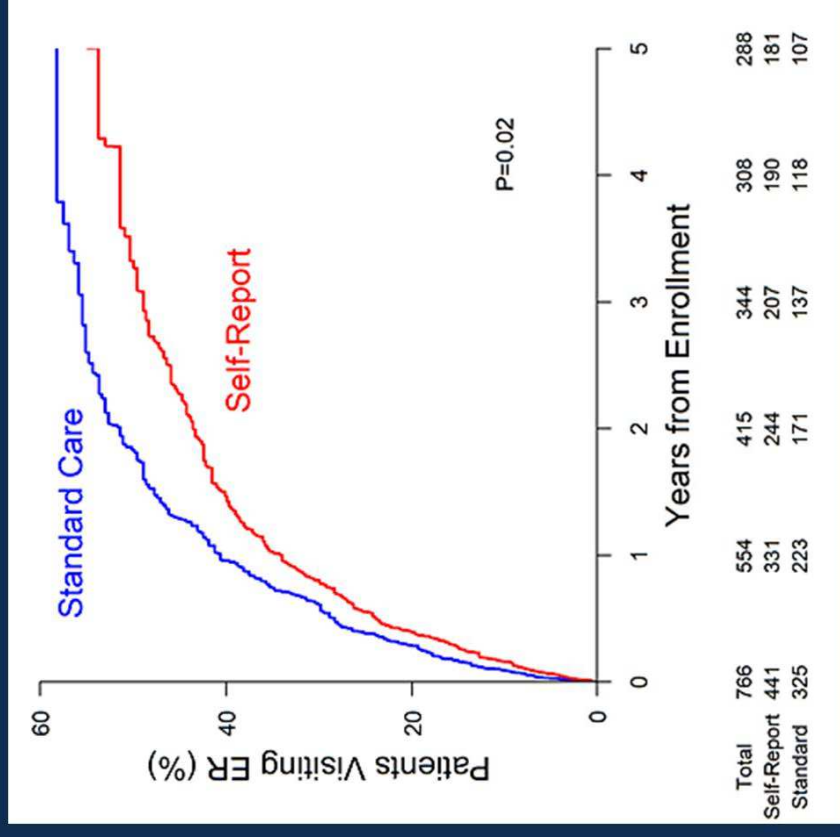
ASCO ANNUAL MEETING '17 | #ASCO17

Presented by: Ethan Basch, MD

Slides are the property of the author. Permission required for reuse.

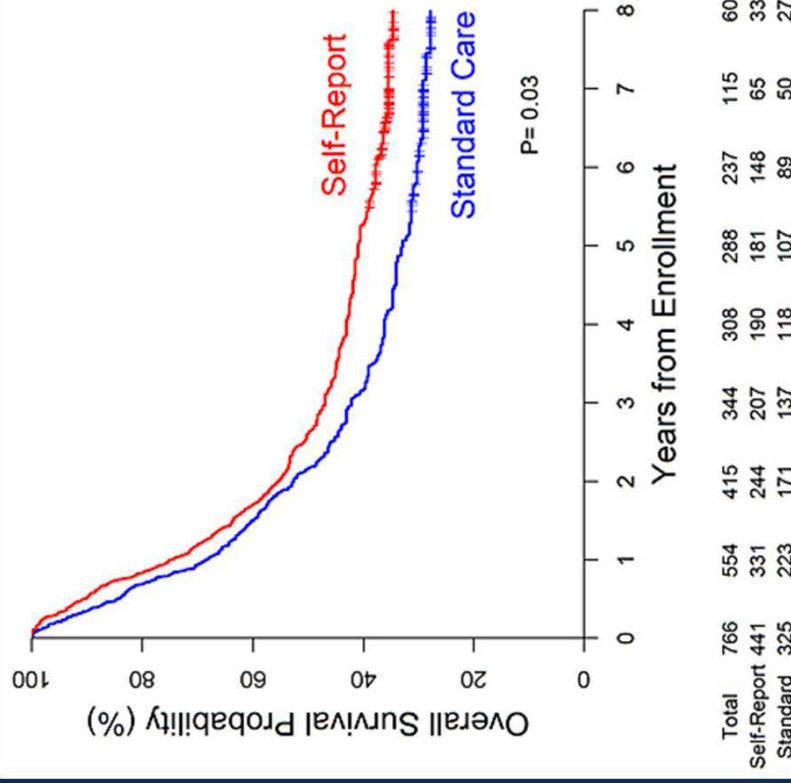
# Proportion of Patients Visiting Emergency Room

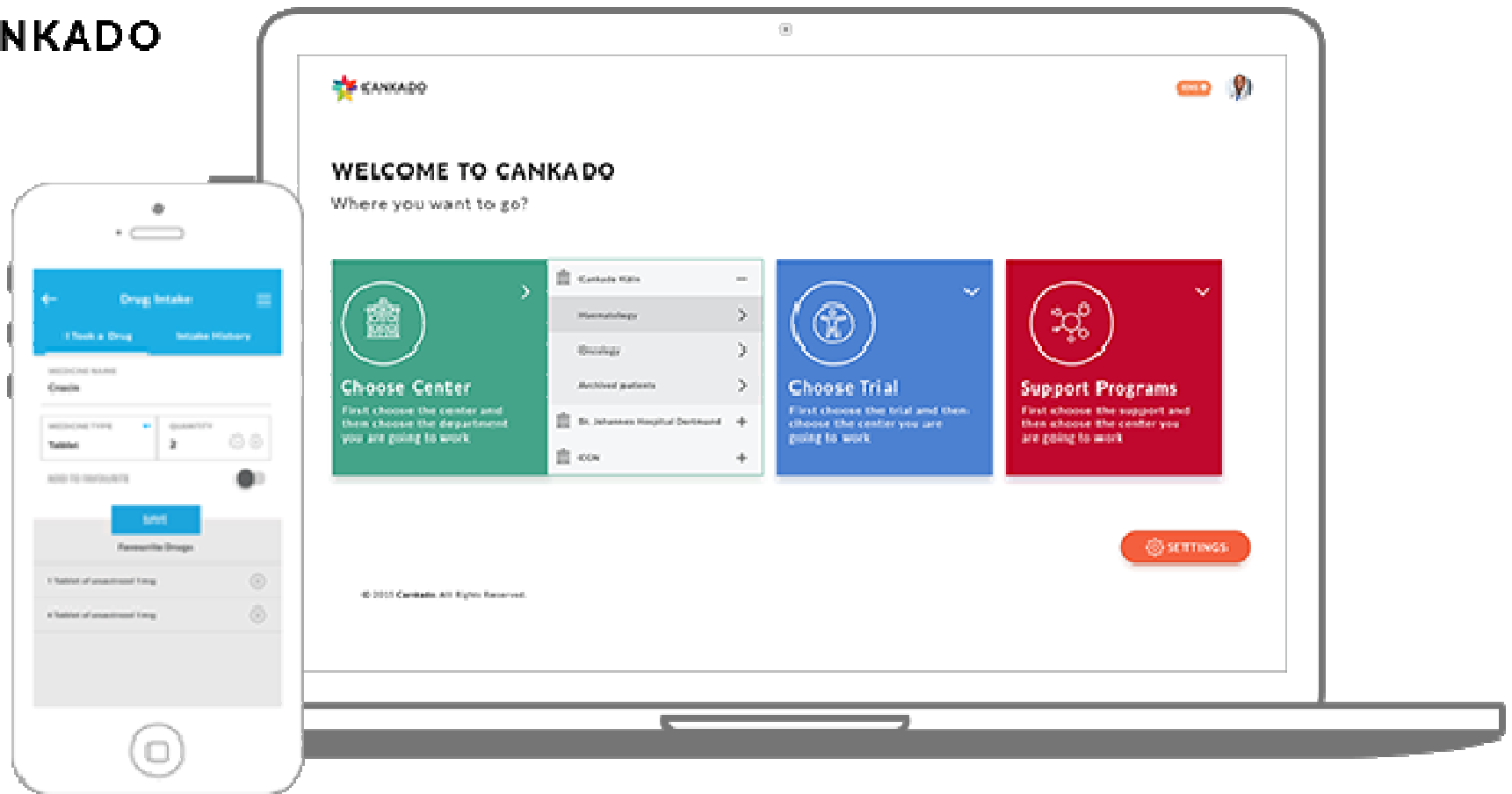
- Compared to standard care, 7% fewer patients in the self-reporting arm visited the ER, with durable effects throughout the study ( $P=0.02$ )



# Overall Survival

- Compared to standard care, median survival was 5 months longer among patients in the self-reporting arm (31.2 vs. 26.0 months) ( $P=0.03$ )
- Remained significant in multivariable analysis: Adjusted hazard ratio 0.832 (95% CI: 0.696, 0.995)







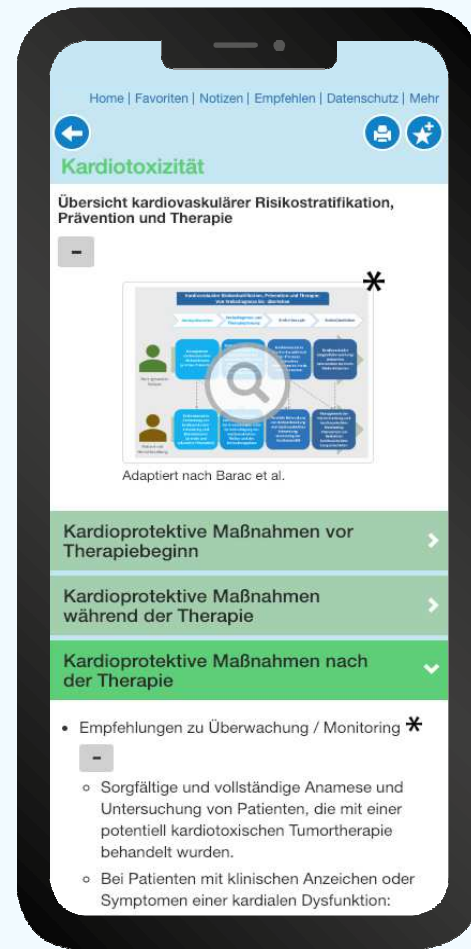


# Infos zur Supportivtherapie in mobiler Form

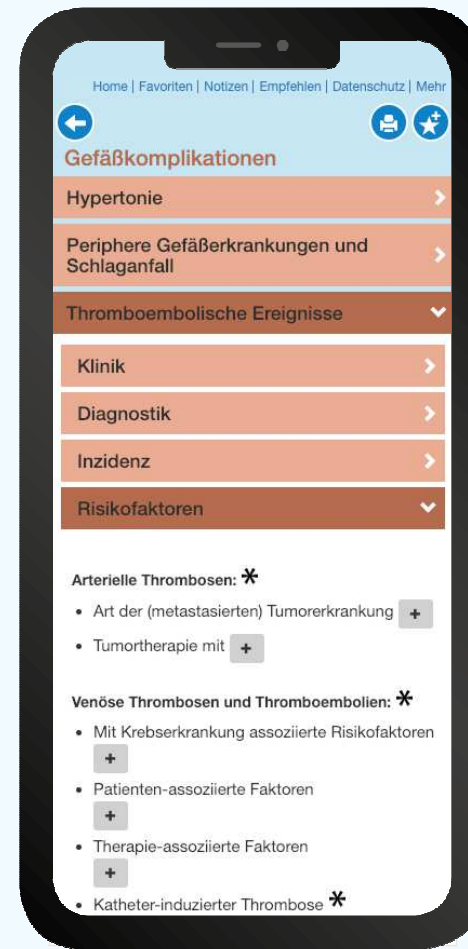
Eine interdisziplinäre App mit umfassenden und aktuellen Informationen zum Nebenwirkungsmanagement



➤ Neue Supportiv-Themen



➤ Prophylaxe & Therapieoptionen



➤ Wissen & Theorie

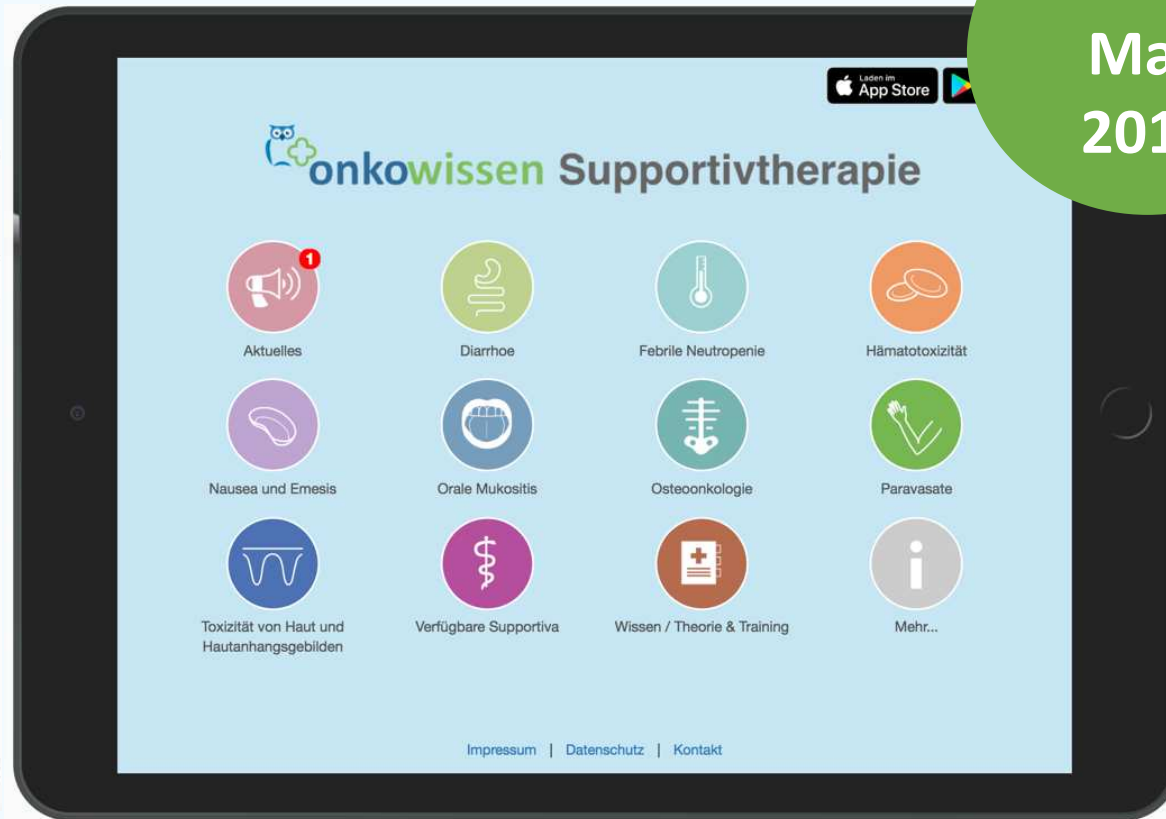


➤ Entwickelt mit Experten

15 JAN 2019

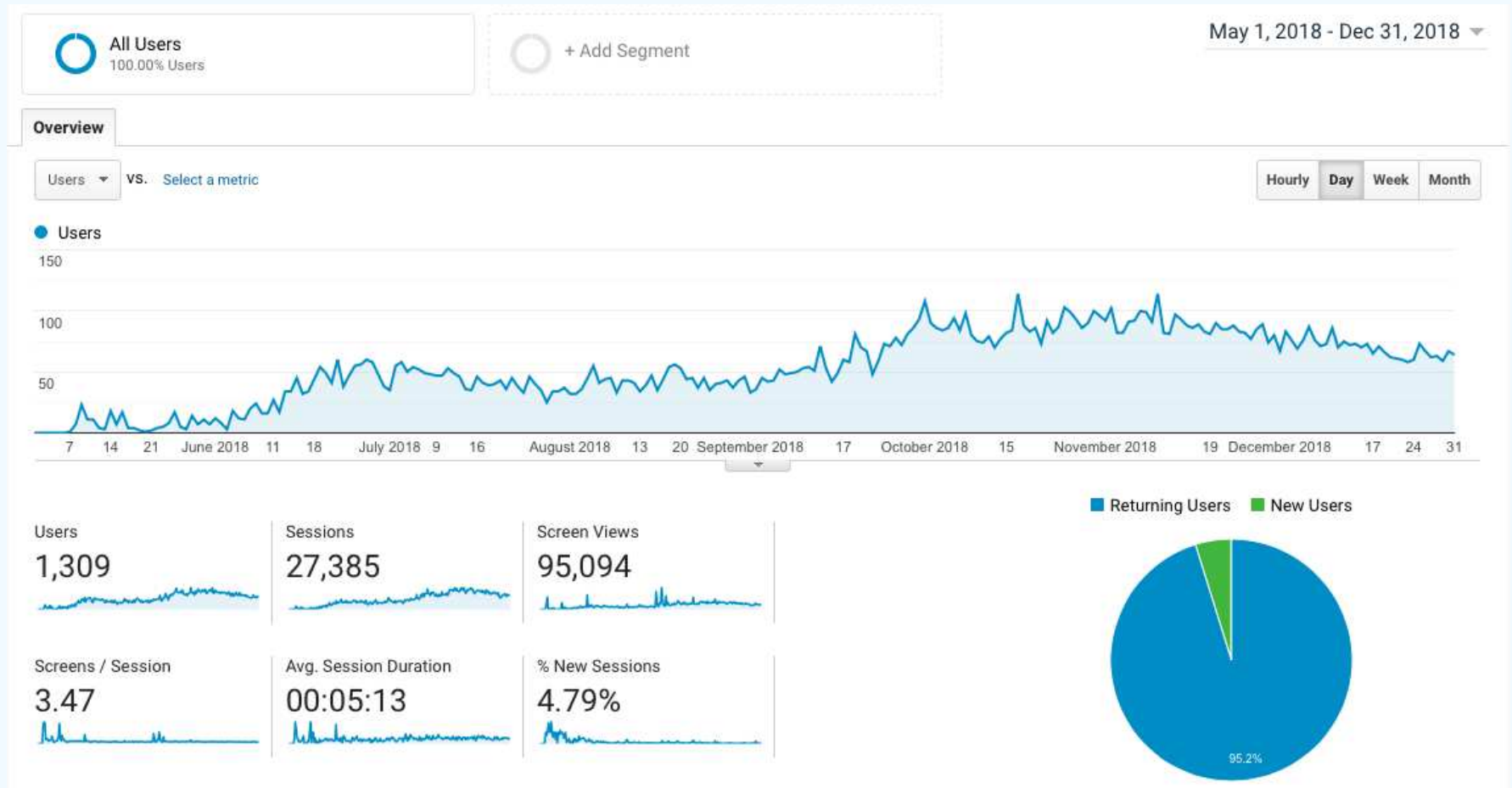
1219 iOS/ANDROID DOWNLOADS

Launch  
May  
2018



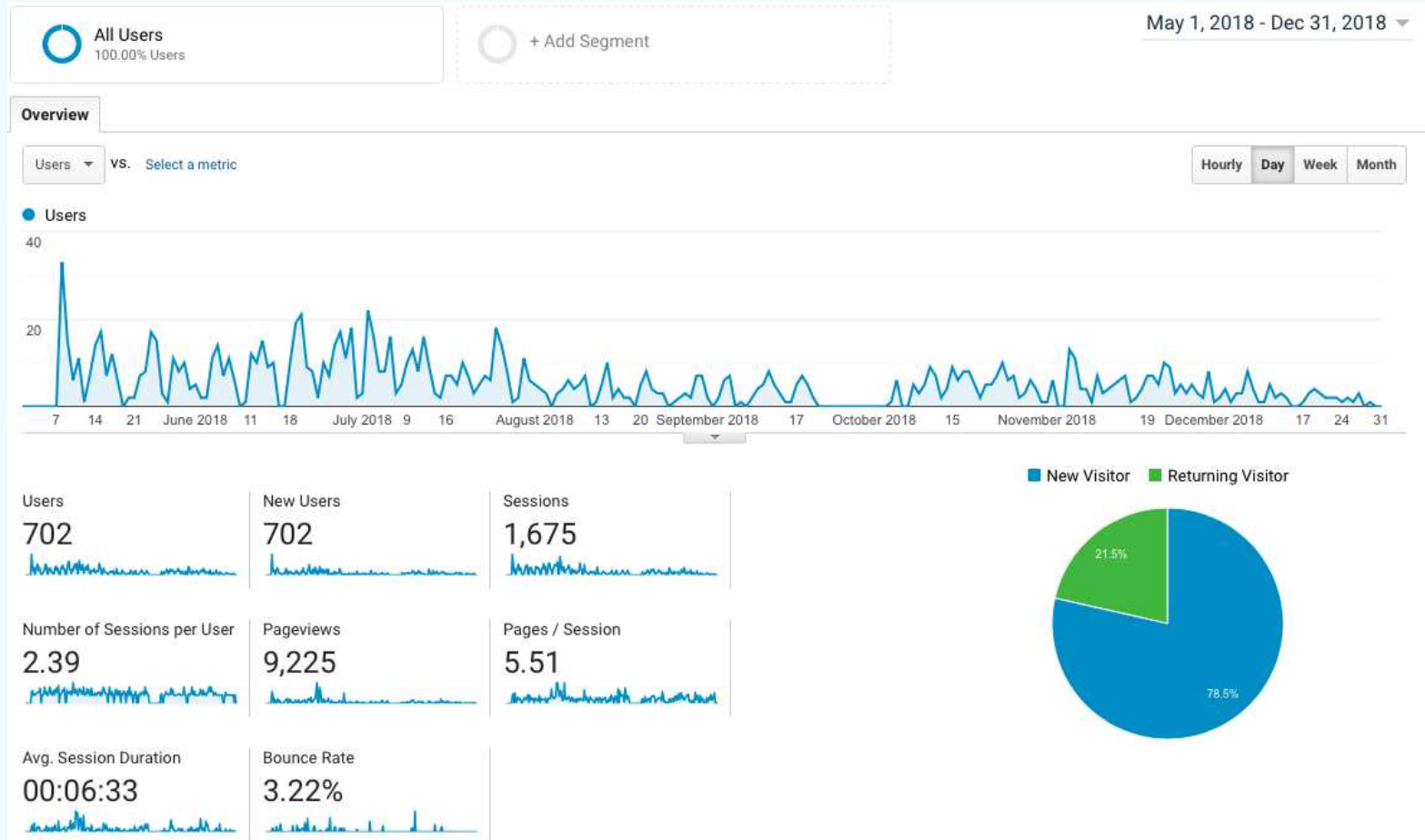
## ONKOWISSEN SUPPORTIVE CARE: MAY - DEC 2018

**1309 MOBILE USERS 27385 SESSIONS 95094 SCREEN VIEWS**



# ONKOWISSEN SUPPORTIVE CARE: MAY - DEC 2018

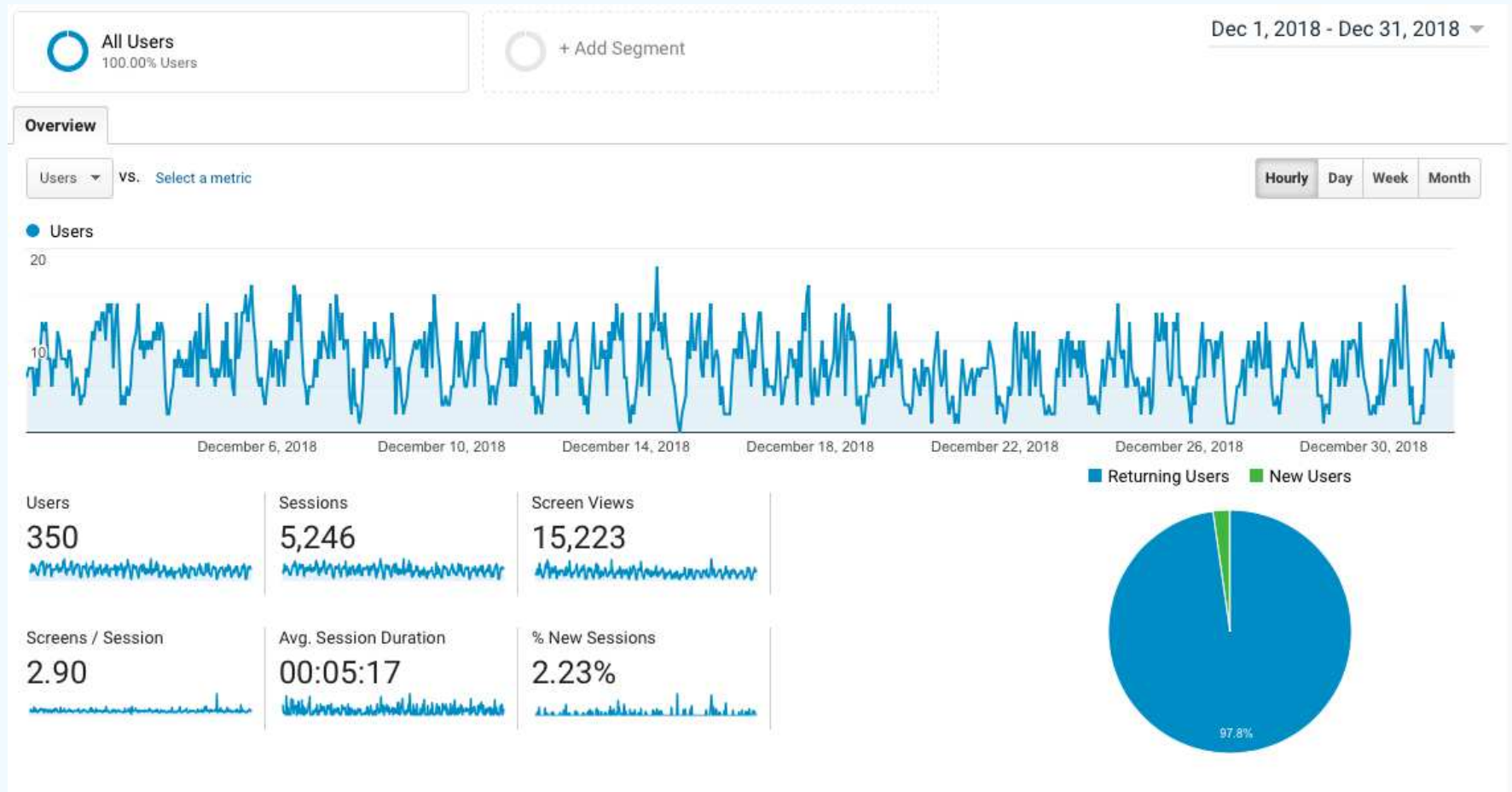
## 702 WEB USERS 1675 SESSIONS 9225 PAGEVIEWS





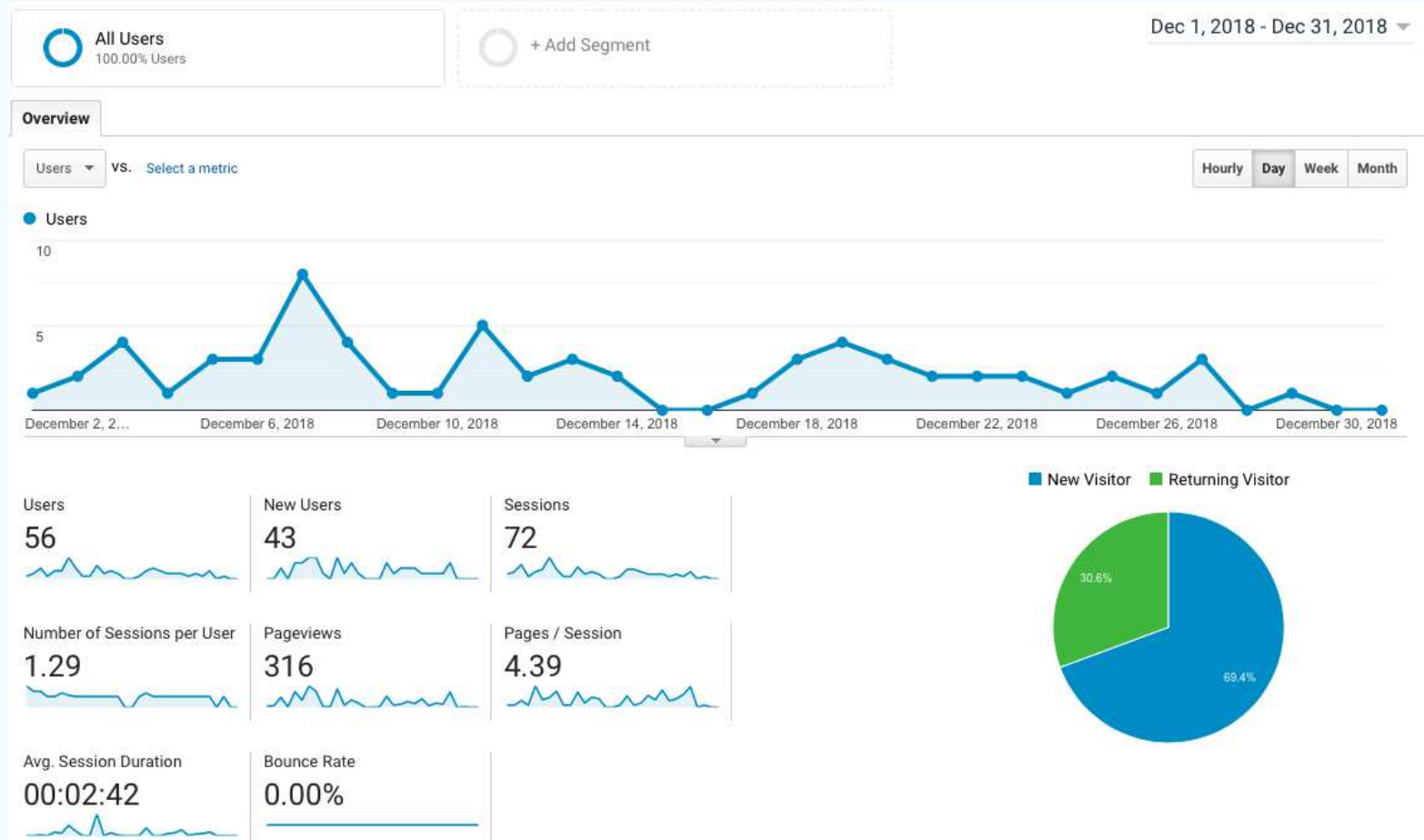
## ONKOWISSEN SUPPORTIVE CARE: DEC 2018

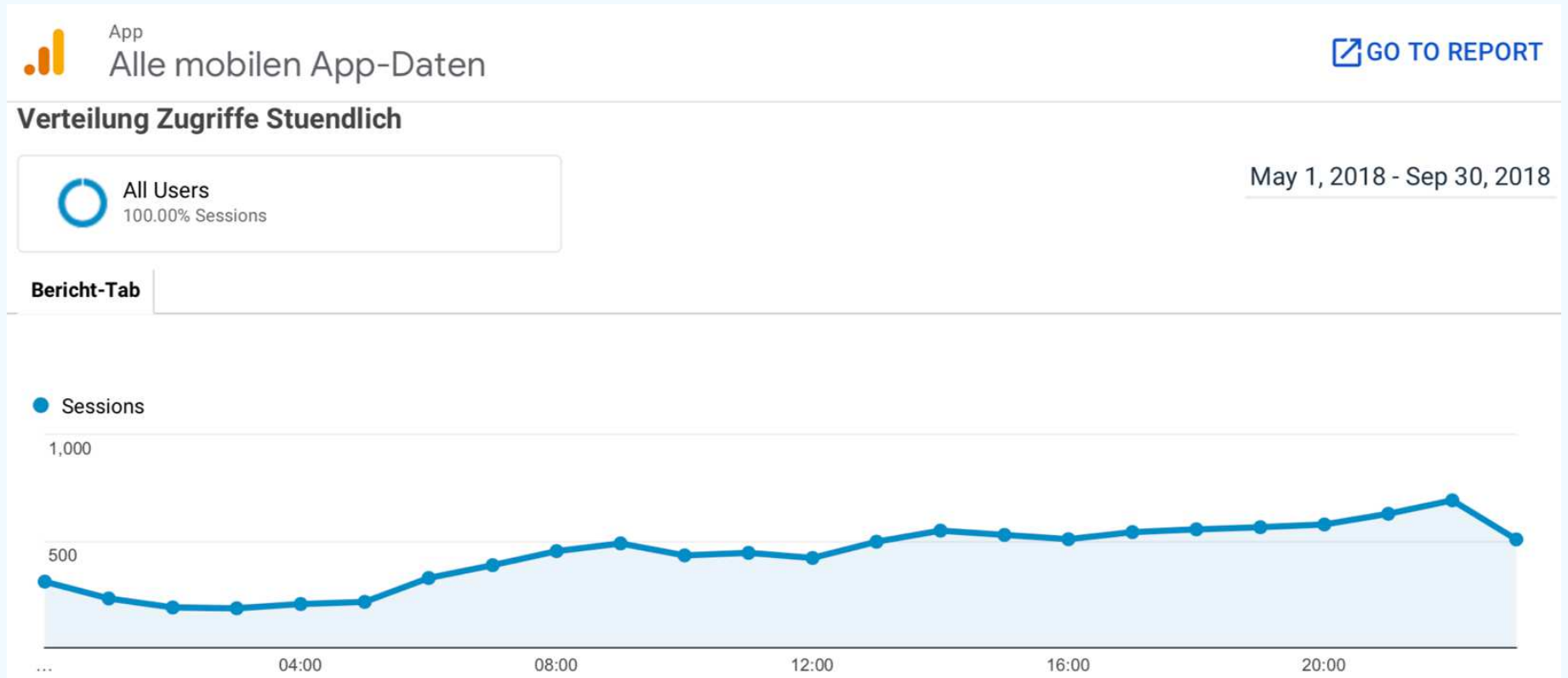
**350 MOBILE USERS 5246 SESSIONS 15223 SCREEN VIEWS**



# ONKOWISSEN SUPPORTIVE CARE: DEC 2018

## 56 WEB USERS 72 SESSIONS 316 PAGEVIEWS





➤ OUR USERS ACCESS THE APP DURING THEIR DAILY ROUTINE!

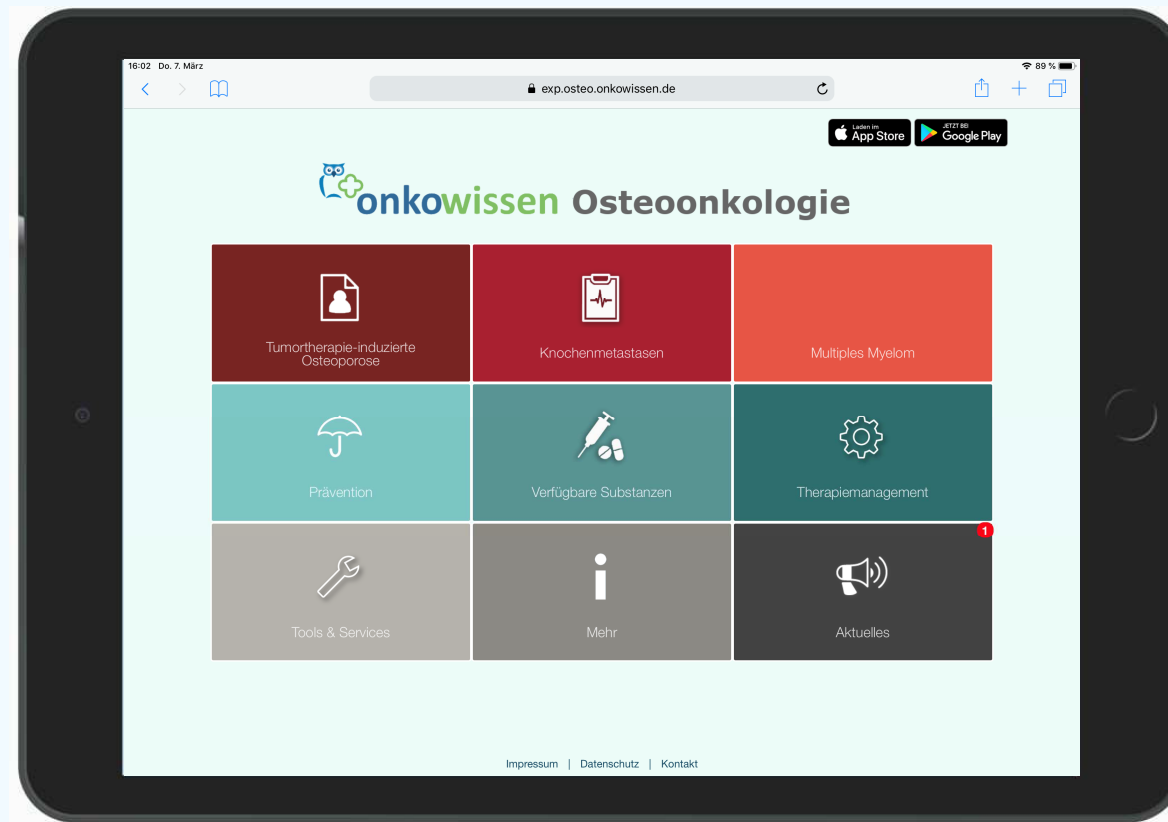
# SUPPORTIV ONKOWISSEN – JUNI 2018

## 266 MOBILE USER UND 1600 SITZUNGEN

| Bildschirmname                                                                                  | Bildschirmaufrufe                                            | Eindeutige<br>Bildschirmaufrufe                              | Durchschn. Zeit auf<br>dem Bildschirm                                   |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------|
|                                                                                                 | <b>6.916</b><br>% des<br>Gesamtwerts:<br>100,00 %<br>(6.916) | <b>3.067</b><br>% des<br>Gesamtwerts:<br>100,00 %<br>(3.067) | <b>00:01:22</b><br>Durchn. für<br>Datenansicht:<br>00:01:22<br>(0,00 %) |
| 1. Home                                                                                         | <b>4.150</b><br>(60,01 %)                                    | <b>1.564</b><br>(50,99 %)                                    | 00:01:39                                                                |
| 2. Mehr... - Login                                                                              | <b>470</b><br>(6,80 %)                                       | <b>273</b><br>(8,90 %)                                       | 00:01:08                                                                |
| 3. Mehr... - Disclaimer                                                                         | <b>404</b><br>(5,84 %)                                       | <b>227</b><br>(7,40 %)                                       | 00:00:20                                                                |
| 4. Wissen / Theorie & Training - Osteoonkologie                                                 | <b>199</b><br>(2,88 %)                                       | <b>35</b><br>(1,14 %)                                        | 00:02:09                                                                |
| 5. Osteoonkologie - AR-ONJ (antiresorptiva-related osteonecrosis of the jaw)                    | <b>187</b><br>(2,70 %)                                       | <b>33</b><br>(1,08 %)                                        | 00:01:01                                                                |
| 6. Aktuelles - Aktuelles                                                                        | <b>166</b><br>(2,40 %)                                       | <b>128</b><br>(4,17 %)                                       | 00:01:21                                                                |
| 7. Osteoonkologie - Knochenmetastasen maligner Erkrankungen                                     | <b>155</b><br>(2,24 %)                                       | <b>44</b><br>(1,43 %)                                        | 00:01:28                                                                |
| 8. Weitere Informationen                                                                        | <b>149</b><br>(2,15 %)                                       | <b>79</b><br>(2,58 %)                                        | 00:00:13                                                                |
| 9. Febrile Neutropenie - Febrile Neutropenie                                                    | <b>136</b><br>(1,97 %)                                       | <b>70</b><br>(2,28 %)                                        | 00:01:00                                                                |
| 10. Paravasate - Paravasate                                                                     | <b>79</b><br>(1,14 %)                                        | <b>42</b><br>(1,37 %)                                        | 00:00:30                                                                |
| 11. Nausea und Emesis - Chemotherapie-induzierte Nausea und Emesis                              | <b>67</b><br>(0,97 %)                                        | <b>39</b><br>(1,27 %)                                        | 00:01:05                                                                |
| 12. Verfügbare Supportiva - Anti-resorptive Substanzen (Bisphosphonate, RANK-Ligand Antikörper) | <b>59</b><br>(0,85 %)                                        | <b>25</b><br>(0,82 %)                                        | 00:02:29                                                                |
| 13. Wissen / Theorie & Training - Febrile Neutropenie                                           | <b>54</b><br>(0,78 %)                                        | <b>37</b><br>(1,21 %)                                        | 00:01:00                                                                |
| 14. Verfügbare Supportiva - Alle Substanzen A - Z                                               | <b>52</b><br>(0,75 %)                                        | <b>26</b><br>(0,85 %)                                        | 00:00:28                                                                |

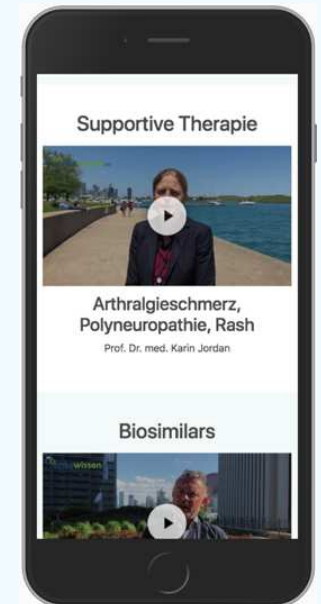
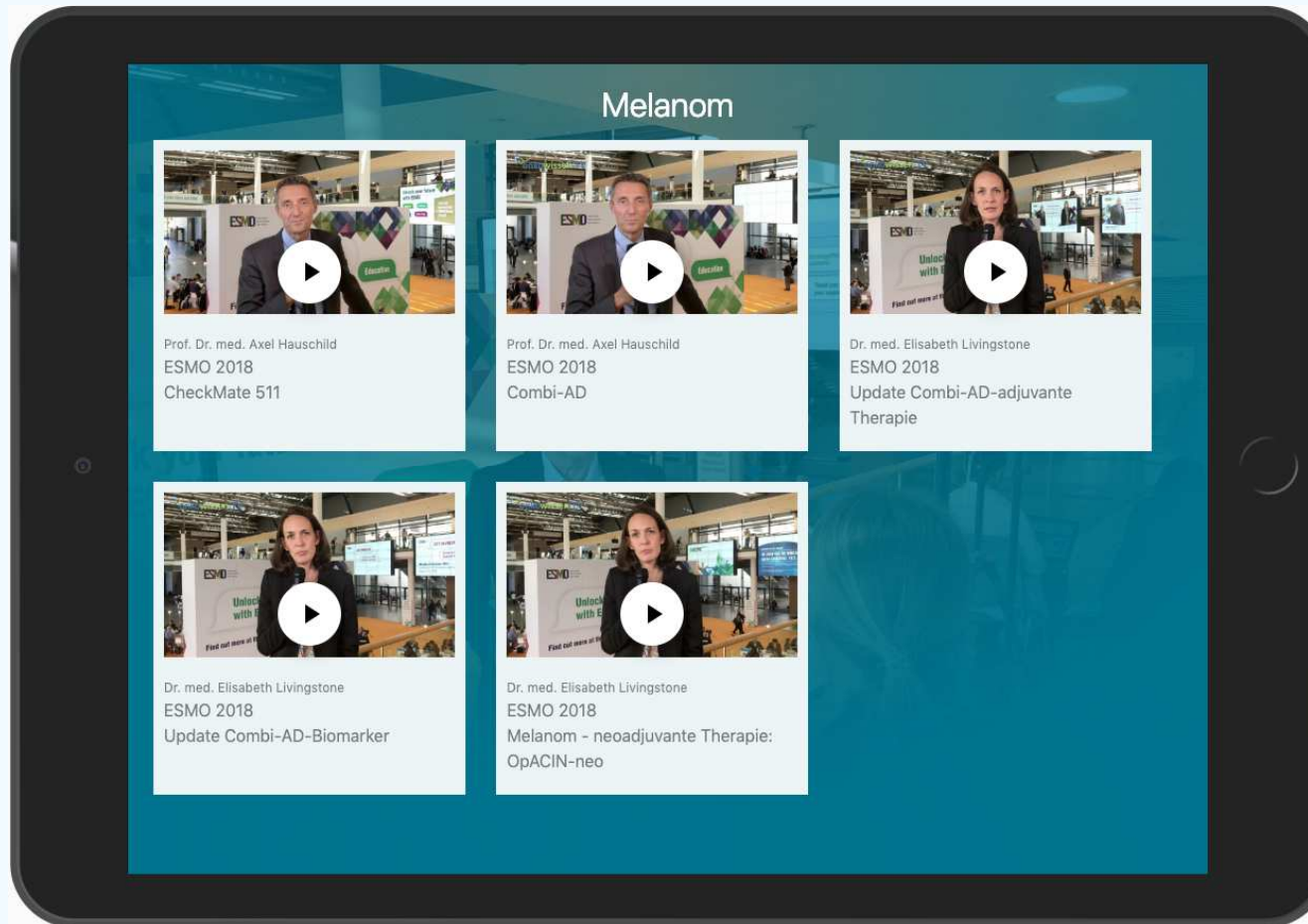


# AB 3./4. MAI 2019 ONKOWISSEN BONE LAUNCH IM RAHMEN DER AKADEMIE KNOCHEN & KREBS, MÜNCHEN

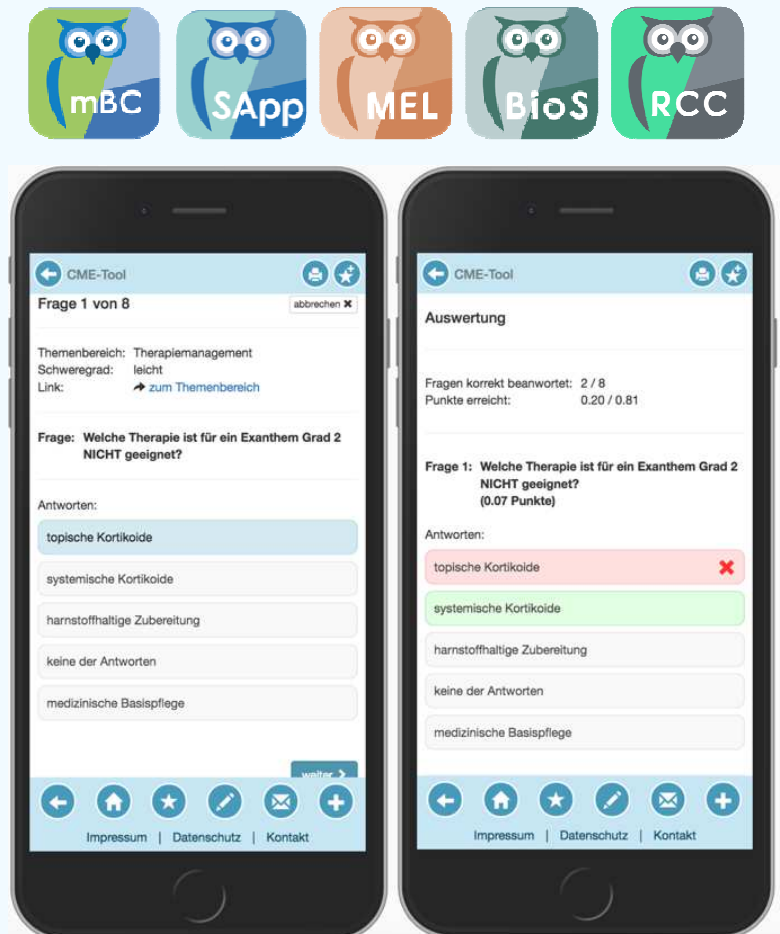
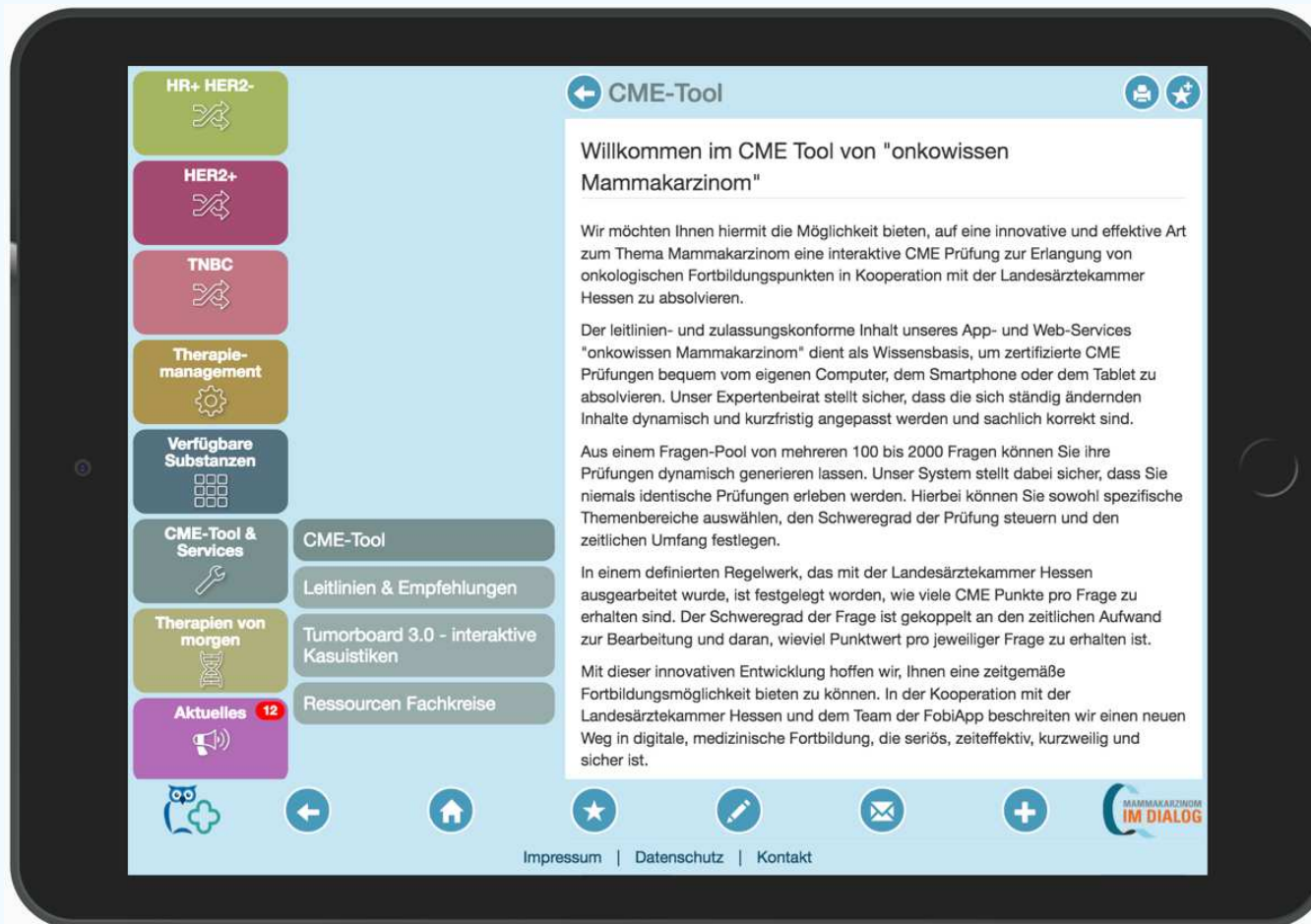




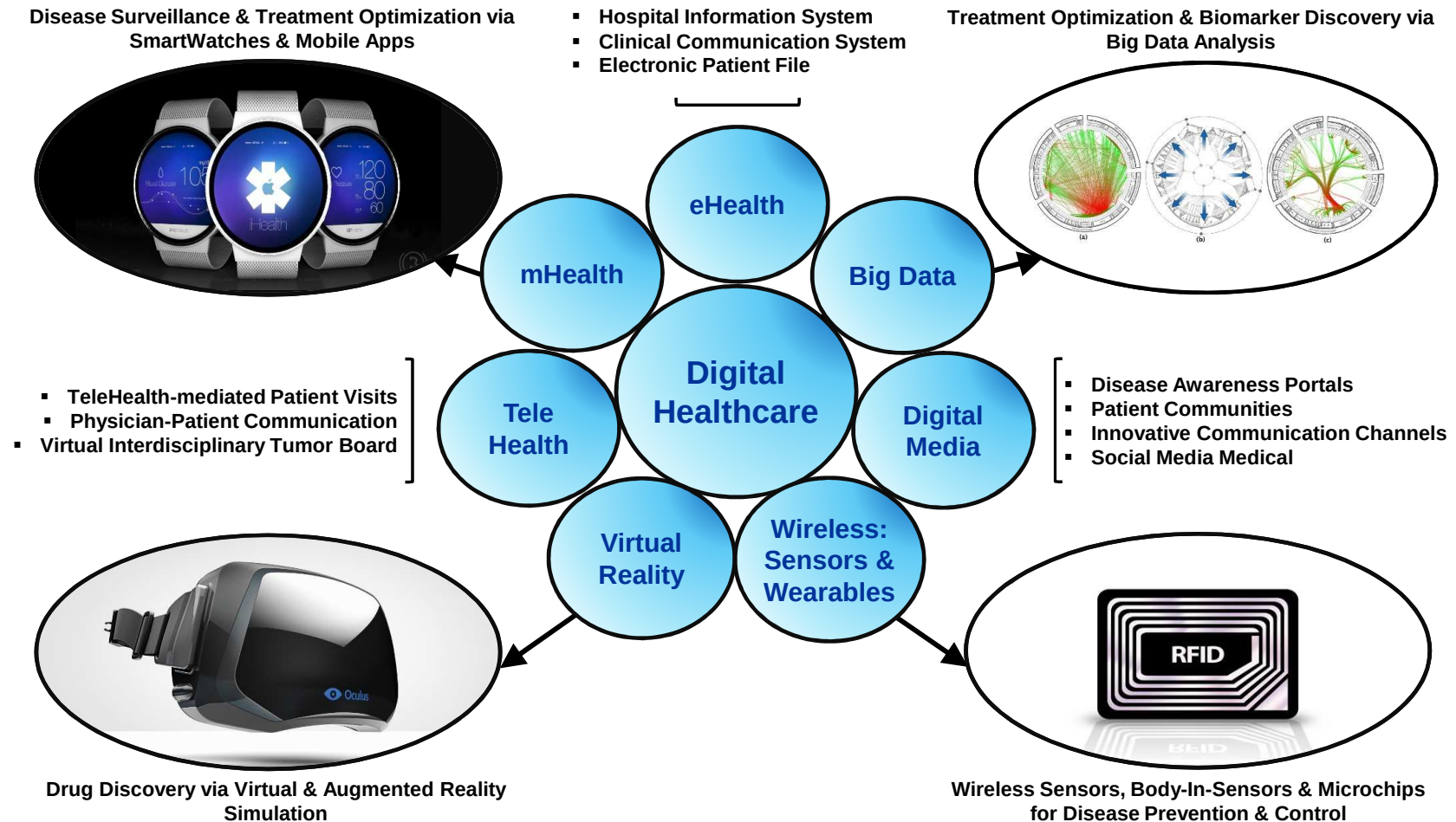
## AKTUELLES IN 100 SEKUNDEN



**Online Berichterstattung von nationalen und internationalen Kongressen**



# Digital Healthcare: AGSMO Workshop 16:30-17:30 Raum 2





OncoConsult



# Herzlichen Dank

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