



# MOMO

## Microbiology Analytics and Clinical Tool for Reporting Pathogens and Antimicrobial Resistances

MOMO (Monitoring of Microorganisms) is a microbiology analytics tool with strong clinical features. MOMO's QuickScan functionality gives immediate overviews including all or only positive, approved results for one patient or department. It serves as a fast clinical tool for the physician and shows up-to-date results.

As microbiology analytics software, MOMO provides all the information on pathogen occurrence, frequency distribution, resistance situation, and resistance change in one place. 58 different parameters allow maximum flexibility for clinical, QM, epidemiology, and research queries. User-defined templates facilitate reporting and benchmarking.

MOMO can work with all lab results available in modern microbiological laboratories: bacteria and fungi including AMR profiles, PCR results, serology results, toxins, microscopy results, miscellaneous remarks, and many more.



**FAST CLINICAL TOOL** *Be aware of all pathogens and resistances present in your ward. Have immediate overview of all or only positive, approved results for one patient or department. Access this information at the bedside or from your computer via any browser. Create and share weekly reports.*



**AMR SITUATION & HISTORY** *Graphically display a pathogen's AMR pattern, view the change of resistance over time, compare the effectiveness of several antimicrobial agents (also over time), and answer your specific questions by customizing your AMR reports with 58 query parameters.*



**INFECTION CONTROL** *Up-to-date information on all pathogens and resistances. Access a patient's or the whole department's recent resistance history. Monitor trends and developments and avoid epidemics in your hospital.*



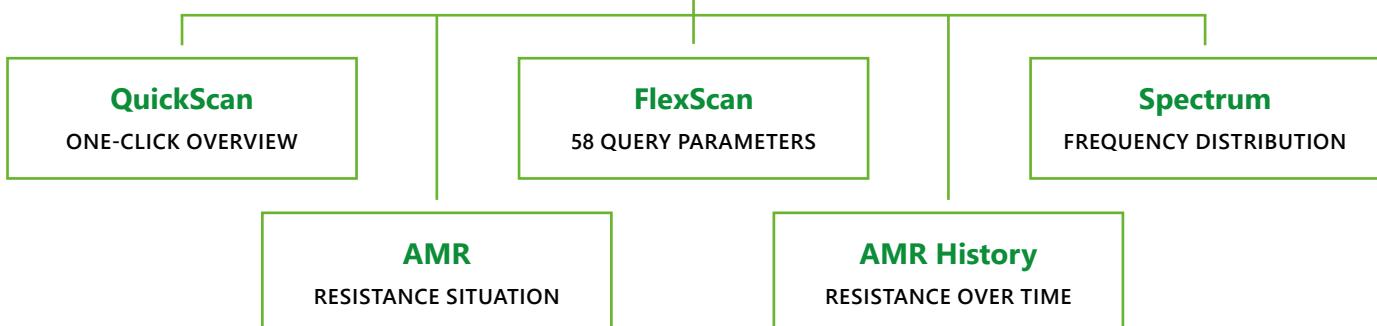
**REPORTS & BENCHMARKING** *Use MOMO for your mandatory AMR reports, internal and QM reports to your hospital's administration, or in medical research projects. Images and .csv files can be exported to Excel or similar programs, allowing you to create diagrams and statistics for your specific purposes.*



**EMR & LABORATORY INTEGRATION** *Doctors can access single patient or department overviews from within the EMR with just one click. Laboratories can include MOMO's graphics and analyses in their outgoing reports. Our technical staff will help connect MOMO to those systems.*

Momo

ALL THE INFORMATION IN ONE PLACE



**QuickScan**

### Patients

**Patient**

Last Name	
First Name	
**** Patient ID	
Date of Birth	<input style="border: 1px solid #ccc; width: 100px; height: 25px;" type="text"/> mm/dd/yyyy <span style="font-size: 2em; vertical-align: middle;">CALENDAR</span>

### Time of Collection

7 Days
14 Days
30 Days
90 Days

or

From

mm/dd/yyyy CALENDAR

to

mm/dd/yyyy CALENDAR

Only positive, approved results

Cancel
Go

## **QUICKSCAN** One-Click Overview

Get single patient or department overviews with just one click using this fast clinical tool. Choose only positive, approved or all results.

## **FLEXSCAN** 58 Query Parameters

Use these highly customizable queries with the full microbiological data available. Answer clinical, epidemiological, research, and QM questions with our 58 query parameters.

MOMO's optimized filtering module provides various options to remove duplicate as well as consecutive isolates. Adjust these methods as you wish (optional).

QuickScan		FlexScan		Spectrum & AMR		Management		Help		Logout		DE		EN																									
Queries		Templates		P. aeruginosa 3MRGN/4MRGN																																			
4189 individual results found. ⓘ Please note that results are only shown for departments you have permission to access.																																							
<a href="#">View details</a>																																							
Patient	Sent By	Collection	Material / Location	Microbiology	Quantity	Approval	Analkin	Aztreonam	Cefazolin	Cefotaxim	Ceftriaxonam	Tazobactam	Ciprofloxacin	Cilastatin	Fondaparinux	Gentamycin	Imipenem	Miperphenem	Piperacillin	Roxepinilic	Tazobactam	Tobramycin																	
Meningitis FlexScan	Hughes, Tammy FlexScan	Knochenmarktransplantation 26.04.1992, F	05/09/2018 09:00	Bronchialsekret	Pseudomonas aeruginosa (mucoid) 4 MRGN	mässig	approved	R	R	R	R	R				R	R	R	R	R	R																		
Pseudom. aer. 3 MRGN mucoid/non... Spermium	Baker, Willie 24.11.1955, M	Urologie 05/09/2018 07:38	05/09/2018 07:38	Sputum	Pseudomonas aeruginosa 3 MRGN	mässig	approved	I	R	S	S	R	S			R	R	R	R	S	R																		
St. aureus FlexScan	Hughes, Tammy FlexScan	Knochenmarktransplantation 26.04.1992, F	05/09/2018 08:00 #7569	Rachen-Abstrich	Pseudomonas aeruginosa (non mucoid) 4 MRGN	mässig	approved	R	R	R	S	R	S			R	R	R	R	R	R																		
					Pseudomonas aeruginosa (non mucoid) 4 MRGN	spärlich		I	R	R	S	R	S			R	R	R	R	R	R																		
					Pseudomonas aeruginosa (mucoid) 4 MRGN	mässig		R	R	R	R	R	S			R	R	R	R	R	R																		
> This month	Hughes, Tammy 26.04.1992, F	Chirurgie Ambulanz 05/08/2018 06:00 #75063	1 Bronchus Engländer	Abstrich	Pseudomonas aeruginosa (non mucoid) 4 MRGN	mässig	approved	R	R	R	R	S	R	MIC> 32mg/l MIC< 32mg/l	MIC> 32mg/l MIC< 32mg/l	R	R	R	R	R	MIC> 256mg/l																		
> Older	Carter, Walter 03.04.1938, M	Chirurgie Ambulanz 05/03/2018 11:00 #7857	intraperitoneal chir. Wunde, Ureter u.UZO	Abstrich	Pseudomonas aeruginosa 3 MRGN	mässig	approved	I	R	R	R	R	S			R	R	R	R	R	R																		
	Butler, Wayne 26.04.1959, M	Chirurgie 05/03/2018 11:25 #7920	BAL-Flüssigkeit	Pseudomonas aeruginosa 4 MRGN	10E2 KBE/ml	approved	R	R	R	S	S	R	S			R	R	R	R	S	R																		
	Butler, Wayne 26.04.1959, M	Chirurgie 05/03/2018 10:58 #7810 (Sample Reverified)	Stuhl	Pseudomonas aeruginosa 4 MRGN	mässig	approved	R	R	R	S	S	R	S			R	R	R	R	S	S																		
	Carter, Walter 03.04.1938, M	Anästhesie/Intensiv 05/01/2018 12:26 #77771 (Sample Reverified)	Abstrich	Pseudomonas aeruginosa 3 MRGN	mässig	approved	S	R	R	R	R	S	S			S	R	I	R	S	S																		
	Thompson, Anna 01.05.1991, F	Urologie 04/02/2018 XXXX #77934	Abstrich	Pseudomonas aeruginosa 3 MRGN	reichlich	approved	S	R	R	R	R	S	R			S	S	S	R	S	S																		
	Hughes, Anna 01.05.1991, F	Urologie 04/02/2018 XXXX #77934	Abstrich	Pseudomonas aeruginosa 3 MRGN	vereinzelt	approved	S	R	R	S	S	R	S			S	S	S	R	S	S																		
	Edwards, Joe 19.07.2000, M	OP 04/02/2018 XXXX #77849	Rachen-Abstrich	Pseudomonas aeruginosa (non mucoid) 3 MRGN	vereinzelt	approved	S	R	R	R	R	S	R	MIC> 32mg/l MIC< 32mg/l	R	R	R	R	R	MIC> 7.5mg/l																			
	Reed, Diana 19.07.2000, M	Strahlentherapie 04/02/2018 15:00 #77650	Abstrich	Pseudomonas aeruginosa 3 MRGN	mässig	approved	R	R	R	R	R	R			S	S	S	R	S	R																			

**FlexScan Report including AMR Profiles (with anonymized test data)**

## SPECTRUM Frequency Distribution

Based on a FlexScan or QuickScan result, Spectrum analyzes these data and provides frequency distributions for each or a combination of the selected parameters.

**MOMO**

- [QuickScan](#)
- [FlexScan](#)

**Queries**      [Templates](#)

- [Today](#)
- [P. aeruginosa 3MRGN/4MRGN Spectrum](#)      11:30
- [P. aeruginosa 3MRGN/4MRGN FlexScan](#)      11:26
- [This month](#)
- [Older](#)

**P. aeruginosa 3MRGN/4MRGN**

Please note that results are only shown for departments you have permission to access.

Microbiology	Count
<b>AMR</b> Pseudomonas aeruginosa 4 MRGN	291
<b>AMR</b> Pseudomonas aeruginosa 3 MRGN	283

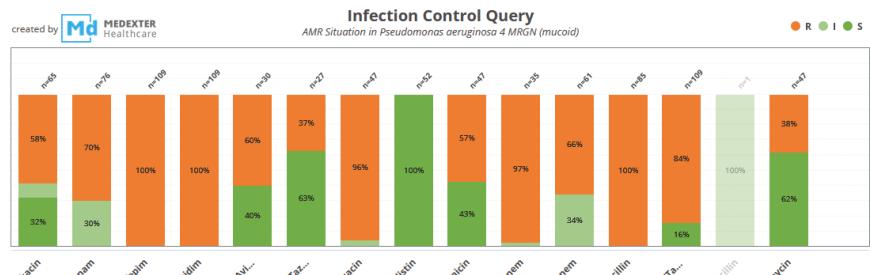
**Get the complete AMR situation for each pathogen by clicking **AMR** in your Spectrum result**

**Infection Control Query - AMR Situation in Pseudomonas aeruginosa 4 MRGN (mucoid)**

Please note that results are only shown for departments you have permission to access.

The category "I - Intermediate" was applicable before 02/01/2015. Since then, this category has been replaced by "I - Susceptible, increased exposure" (see EUCAST changes [eucast.org/newsandr](#)).

**Infection Control Query**  
AMR Situation in Pseudomonas aeruginosa 4 MRGN (mucoid)



Antibiotics/Antimycotics	n	<b>Resistant (R)</b>		<b>Susceptible, increased exposure (I)</b>		<b>Susceptible, standard dosing regimen (S)</b>	
		absolute	relative	absolute	relative	absolute	relative
Amikacin	65	38	58.46%	6	9.23%	21	32.31%
Aztreonam	76	53	69.74%	23	30.26%	0	0.00%
Cefepim	109	109	100.00%	0	0.00%	0	0.00%
Ceftazidim	109	109	100.00%	0	0.00%	0	0.00%
Ceftazidime/Avibactam	30	18	60.00%	0	0.00%	12	40.00%

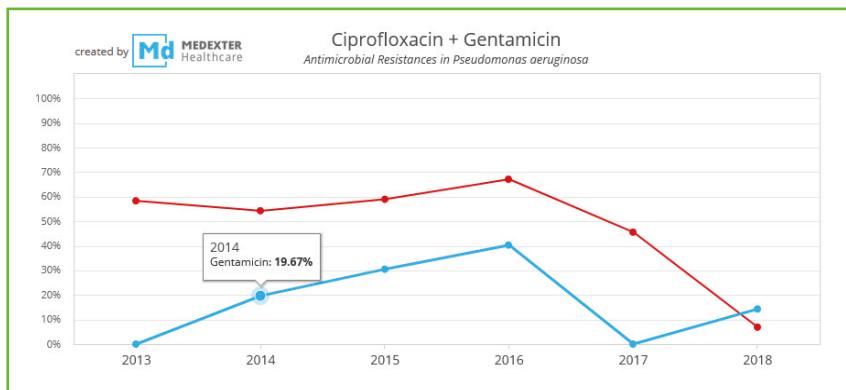
**Graphically displayed antimicrobial resistance pattern for each pathogen**

## AMR Resistance Situation

By clicking "AMR" in your Spectrum results, you can access and graphically display the complete antimicrobial resistance situation for every found pathogen. The antimicrobial resistance information is based on the S-I-R model and coded in three colors. Differences in the number of tests for individual antimicrobial agents are explicitly indicated. Click on any antibiotic or antimycotic to view its resistance over time.

## AMR HISTORY Resistance Over Time

Find out how the resistance of a pathogen to an antibiotic/antimycotic has changed over time. Graphically display several agents to compare their effectiveness:



## KEY BENEFITS

- ✓ Customizable Queries
- ✓ Frequencies and Trends
- ✓ User-defined Templates
- ✓ Image and .csv exports
- ✓ High Query Performance
- ✓ Saves Time and Costs
- ✓ Available in English + German

## BENCHMARKING SUPPORT

You want to participate in national (e.g., the yearly official Austrian Resistance Report *AURES*) or international (e.g., The European Surveillance System *EARS-Net*) benchmarking networks? Discuss with us the regular, time- and cost-saving electronic data export to the requesting national reference centers and to ECDC, Stockholm.

## SELECTED REFERENCES

Grob, M., Watzinger, C., Willinger, B., Thalhammer, F., Koller, W., Rappelsberger, A. & Adlassnig, K.-P. (2024) *A Microbiology Analytics Tool to Evaluate the Burden of Antibiotic-Resistant Infections*. In Mantas, J., Hasman, A., Demiris, G., Saranto, K., Marschollek, M., Arvanitis, T.N., Ognjanović, I., Benis, A., Gallos, P., Zoulias, E., Andrikopoulou, E. (Eds.) *Digital Health and Informatics Innovations for Sustainable Health Care Systems*. Proceedings of MIE 2024, Studies in Health Technology and Informatics 316, IOS Press, Amsterdam, 1911–1915..

Koller, W., Kleinoscheg, G., Willinger, B., Rappelsberger, A. & Adlassnig, K.-P. (2019) *Augmenting Analytics Software for Clinical Microbiology by Man-Machine Interaction*. In Ohno-Machado, L. & Séroussi, B. (Eds.) MEDINFO 2019: Health and Wellbeing e-Networks for ALL – Proceedings of the 17th World Congress on Medical and Health Informatics, Studies in Health Technology and Informatics 264, IOS Press, Amsterdam, 1243–1247.

## THESAURUS MANAGEMENT

MOMO allows data import from one or more microbiological data sources (current and/or historical data). Thesauri can be either provided by the hospital or by Medexter. MOMO requires thesauri for **MICROBIOLOGY**, **SAMPLE MATERIAL**, **ANTIBIOTICS/ANTIMYCOTICS**, and **DEPARTMENTS**.

Our thesaurus management is part of MOMO's management module and serves as an excellent tool (a) to build new thesauri or (b) for thesaurus maintenance on a regular basis. Both can be done by the customer or provided as a service by Medexter (please specify and request).

## CONTACT US

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