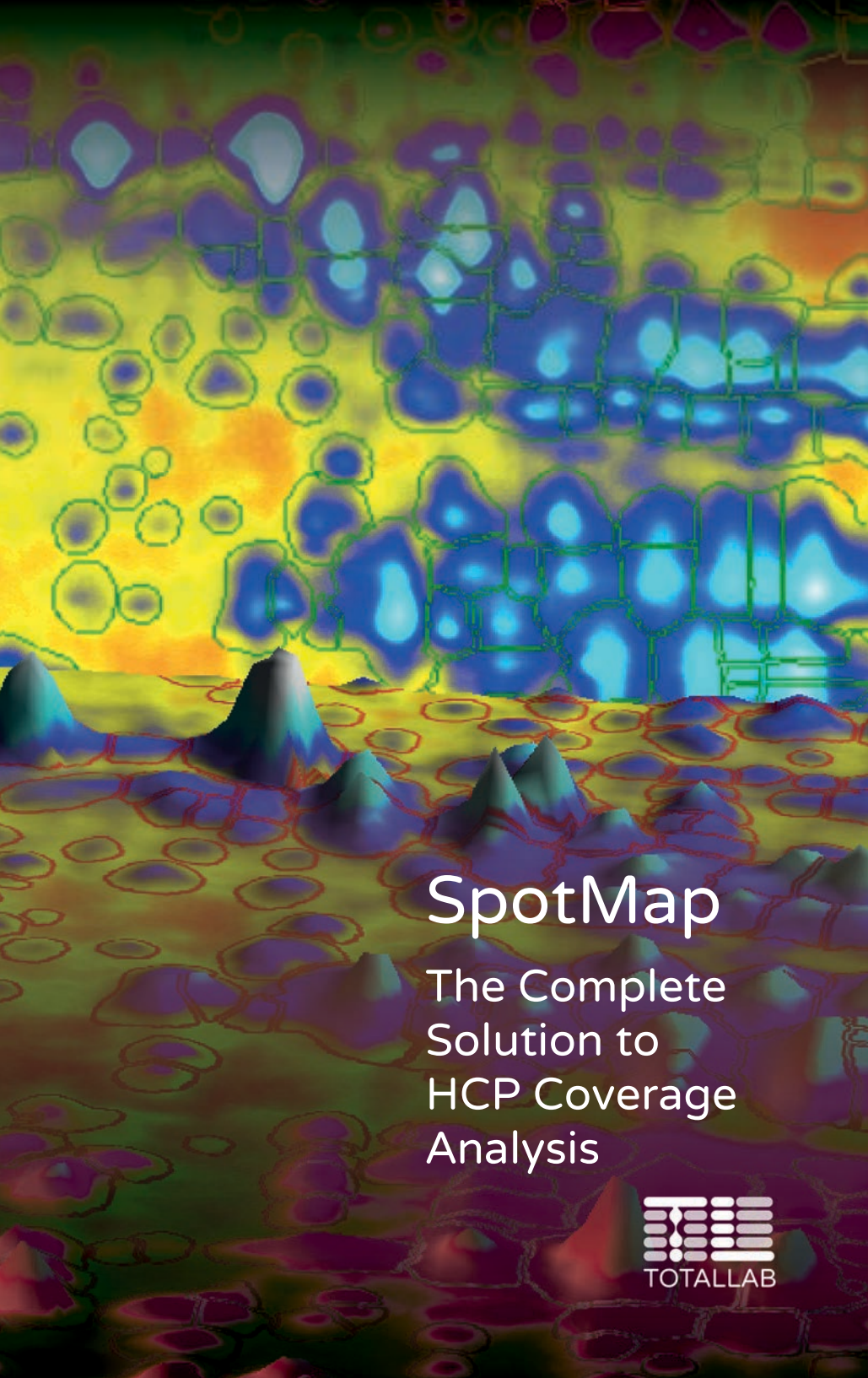
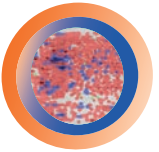

SpotMap
The Complete Solution to HCP Coverage Analysis
TOTALLAB

What's new?

We've added a several new tools to help you analyse HCP coverage more quickly and accurately (requests (R) provided by our biopharma customers)

Coverage by volume (R)	Calculating abundance to demonstrate antibody % concentration
21 CFR support (R)	Improved support for 21 CFR incl. reporting, secure login & audit trails for regulatory approval (additional module)
Product spots (R)	Accurately identify cross-reactivity among antibodies and product
Toolbar & menus (R)	Simplified menus incl.. NEW spot outline toggle, NEW colour spot labels & improved MW and pI assignment tags
Advanced spot detection (R)	Automatically detect spots on every image required for an experiment

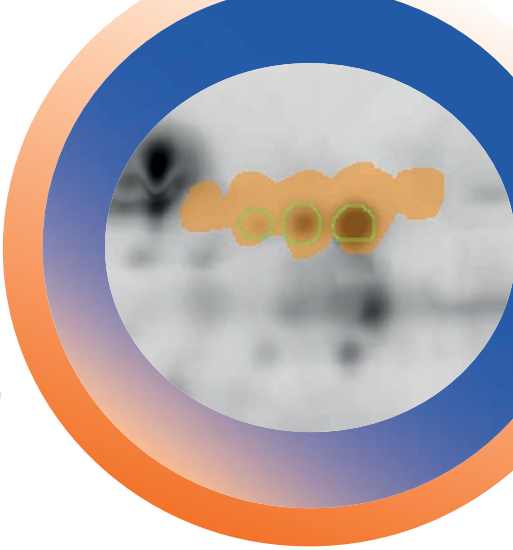
2015



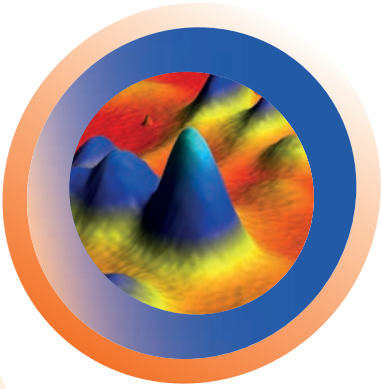
2016

Complete solution for analysing HCP coverage...

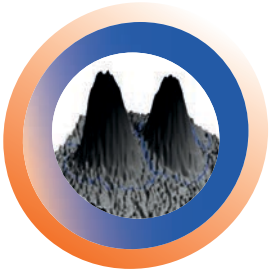
2019



2018



2017



Generate extensive data-driven insights

SpotMap is easy to use and gives you fast, reproducible results regardless of software expertise. Produce accurate results with greater confidence.

Widely used for:

- HCP coverage analysis
- Bioprocess improvement
- Analytical development

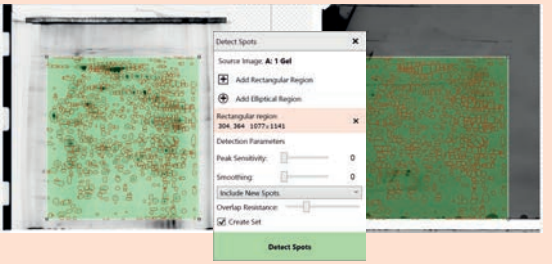
Automating your 2D WB analysis

Combining the speed, flexibility, and unmatched automation to get better, more objective results.

Remove spot overlapping

Filters allow users to accurately detect and review more spots, more quickly.

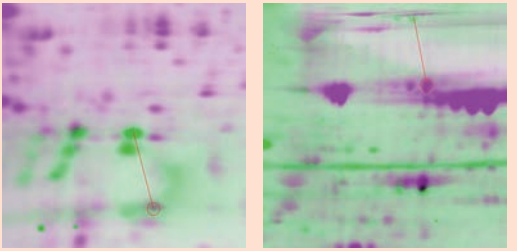
Figure 1: Adjusting the filter for your gel blot images, allows the software to detect more real spots.



Accurate alignment algorithms

Auto-aligning algorithms accurately align gel images with little or no manual intervention and no need for spot matching.

Figure 2: Only 2 manual alignment vectors are needed to accurately align the gel and blot images.



Automated spot detection

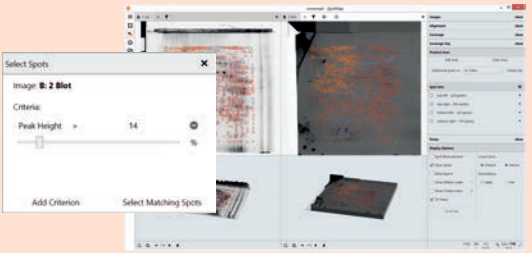
Automated spot detection removes potential manual spot editing for increased objectivity.

Figure 3: Spot detection is automated on each image determining accurate detection.

Pre-defined filters

Pre-defined filters allow users to get better, more reproducible outcomes.

Figure 4: Replicate your analysis with automated filters that generate reproducible results.



No other software allows such advanced automation to achieve reproducible coverage results.

Coverage by Volume

A new way to verify your HCP antibody reactivity (without any additional setup)

Coverage by volume allows you to track how **much of the total protein** is actually being detected by the anti-HCP antibodies in your 2D Western blot experiment.

Why is it important?

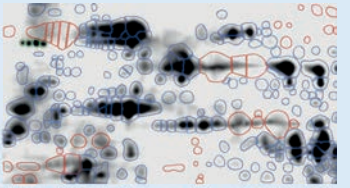
Not all spots are created equal. This tool ensures you have complete understanding of the antigen quality.

In this case, we generated 83% traditional coverage but the case could be that the anti-HCP antibodies aren't reacting to the high abundance spots on the gel.

This means that you're blind to the poor antibody reactivity as it appears to have very good coverage. Meaning you could qualify bad antibodies for ELISA based on that coverage analysis.

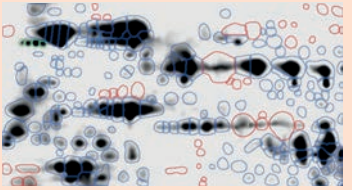
But that's not all....

If you go ahead with that antibody for ELISA Validation you will increase the risk of project delays due to poorly documented ELISA.



Western blot - Image 1

83%
Coverage

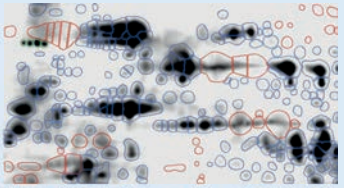


Western blot - Image 2

83%
Coverage

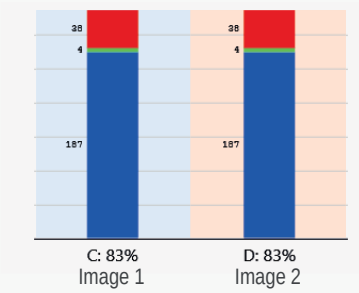
The first comprehensive software allowing scientists to generate the most detailed data ever

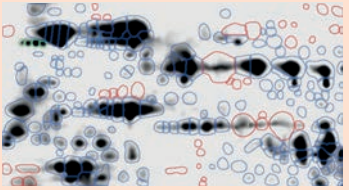
If you measure the assay by volume & by presence/absence you gain valuable insights that ensures you have increased understanding of the antibody quality.



Western blot - Image 1

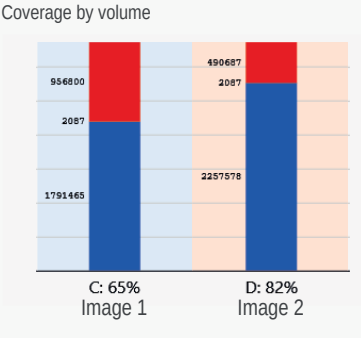
65%
Coverage by vol





Western blot - Image 2

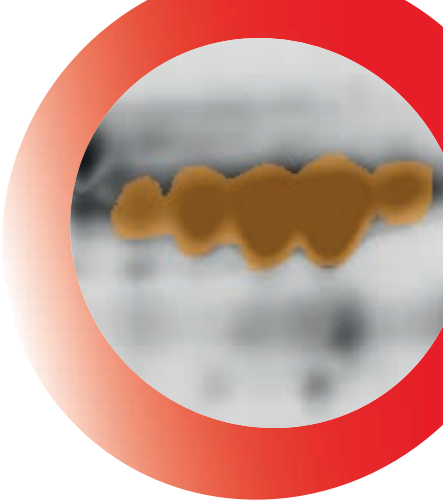
82%
Coverage by vol



This means...

In the case above the 17% difference in the coverage by volume result means that Western blot - Image 2 has the best validation results.

Determine coverage of the most important HCPs (those high abundance spots that the antibodies may miss)



Product Spots

Identify Cross-Reactivity Among Anti-HCP Antibodies and your Drug Substance

Discover any reactivity of the antibodies with your product protein, and quickly report your findings. SpotMap saves time, and guides you to make more informed decisions.

Fast evaluation

Cross-reactivity interferes with accurate measurement of HCP coverage. Quickly visualise any suspected cross-reactivity in under 30 seconds.

Reach better decisions

New ways to evaluate the data could prevent the commitment of costly and unnecessary resources to improve bioprocess development.

Unequalled solutions

The first of its kind, product spots allows you to identify if a reaction on the blot corresponds to your product area.

Easy-to-use

Easily highlight and overlay product area on all images.

If the anti-HCP is recognizing a product associated spot, this suggests cross-reactivity.

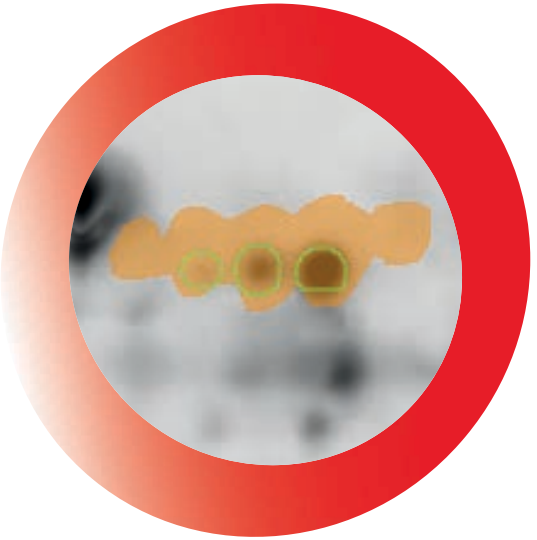
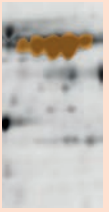
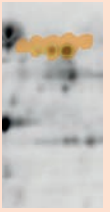


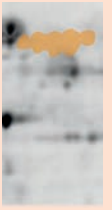
Figure 5 (right): Western blot 1, the antisera has shown some reactivity product. Western blot 2 demonstrates that the antisera has no cross reactivity with the product (no spots shown in highlighted area).



Gel



Western blot 1



Western blot 2

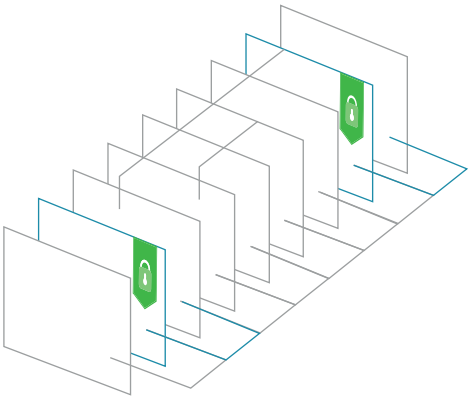
Cross-reactivity interferes with accurate measurement of HCP coverage

Meet your Compliance Needs

Characterize your HCP ELISA antibodies with confidence, and support your requirements for transparent electronic records, signatures and regulatory reporting.

Compliance and flexibility in a single solution

Using a flexible workflow you gain complete control of your analysis - whilst tracking, recording and authenticating experiments.



Unrivalled compliance

SpotMap is uniquely designed for integration in cGMP laboratories to support 21 CFR part 11 regulations.

Automatic report builder

Export experiment reports, which collect all data required to repeat the experiment for regulatory approval.

Robust authentication

User-name and password security in SpotMap provides rigorous security supporting data integrity.

Comprehensive audit trails

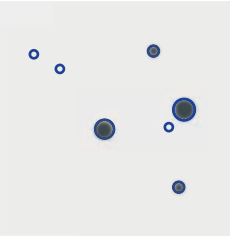
Store time, date, signature stamped audit trails for 21 CFR traceability requirements.

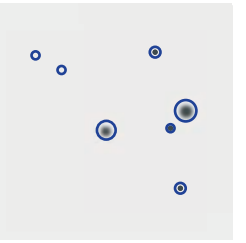
Supports your 21 CFR Part 11 requirements for: transparent electronic records, signatures and regulatory reporting

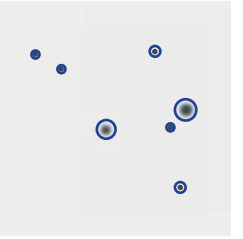
Automatic Spot Detection Across Multiple Exposures in a Single Analysis

Detect spots on WB images acquired at multiple exposures.

Automatically combine all of your spot outlines captured from multiple exposure times to determine accurate coverage.



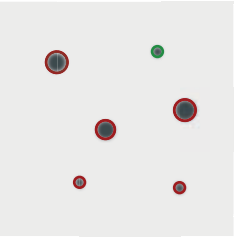


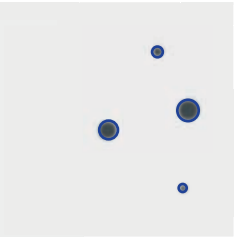


Increased Automation in Spot Detection

Automatically detect spots on every image required for an experiment.

In order to achieve fast and reliable image analysis, you should use automatic spot detection on all images. SpotMap allows you to detect on all images and combines them to achieve an objective, data rich protein map.





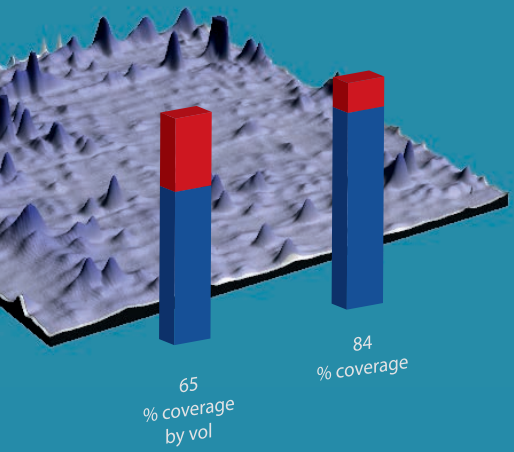
Speed

Typical ideas of the percentage coverage in less than 10 minutes.

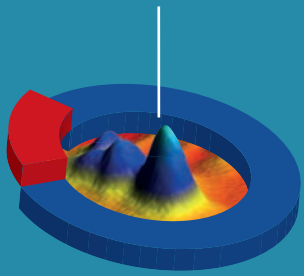
Objectivity

Automatic detection is proven to give reproducible results between different users.

Proven to give you an accurate idea of coverage in less than 10 minutes



84
% coverage

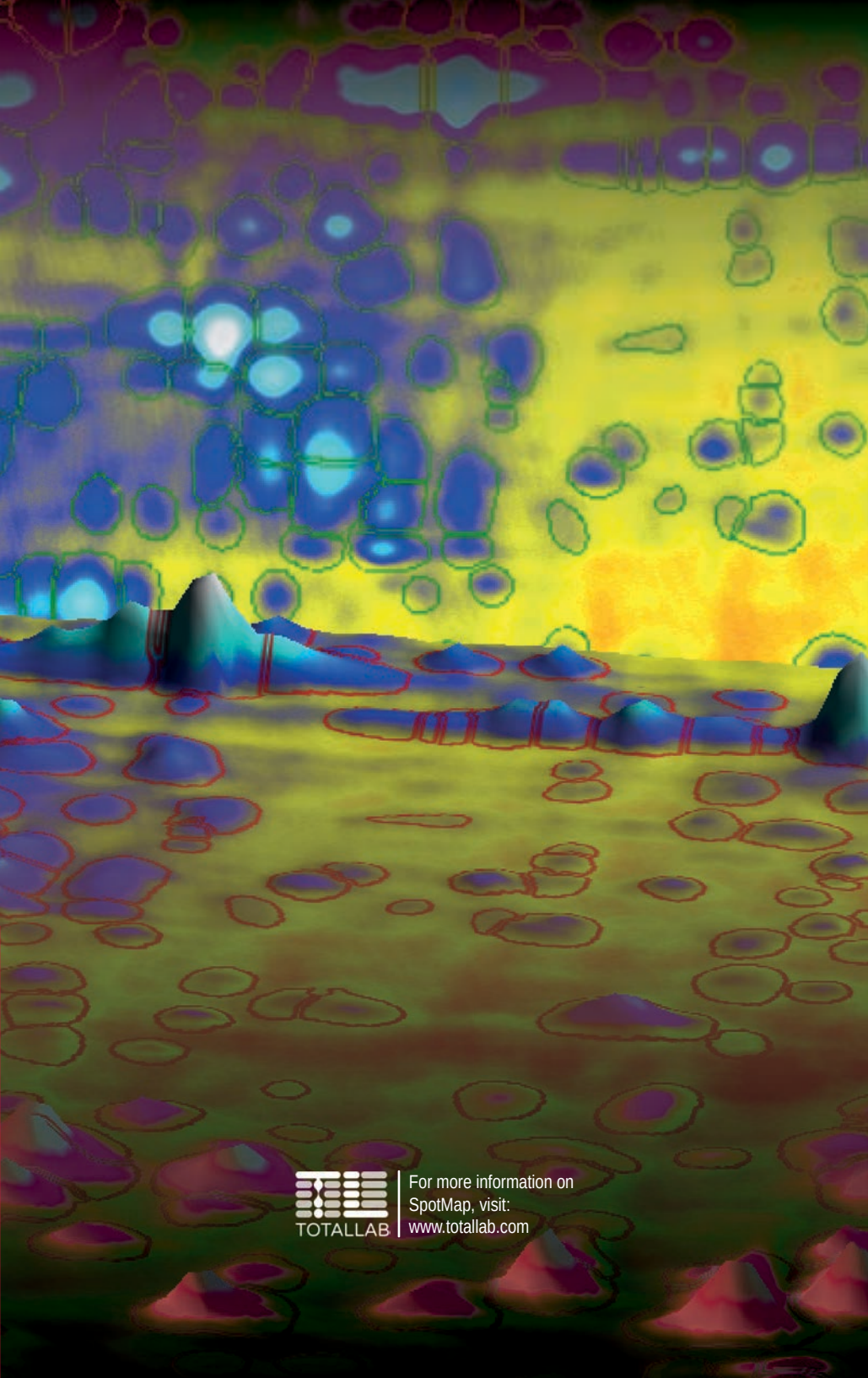


Join over 30 global pharmaceutical companies using SpotMap for HCP coverage analysis

Get a free 14 day trial of SpotMap 5

From images to results in just 1 hour

Just head to totallab.com and sign up for a free demo to access SpotMap and learn more about which tools will help you save time and deliver quality image analysis results.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