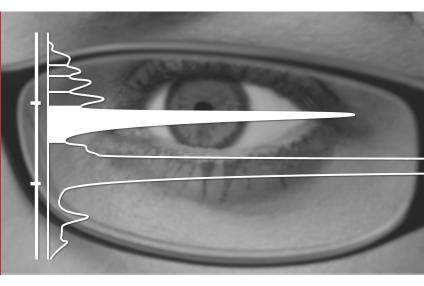


# See More than an A1c Number

Tosoh G8 delivers HbA1c results with a detailed graphic representation of the patient, allowing you to see all that is behind the number.





# GS HPLC ANALYZER

- Gold Standard HPLC Methodology
- Time tested Coefficient of Variation (CV) of less than 2%
- Proven track record of instrument reliability
- Method of choice for accurate A1c results without common hemoglobin variant interference
- The G8 grows with your needs and is an ideal partner for laboratories with Track Line Automation needs



**Speed** HbA1c analysis in 1.6 minutes



Precision Less than 2% CVs



Low Maintenance

Automated daily and monthly maintenance

# TOSOH BIOSCIENCE

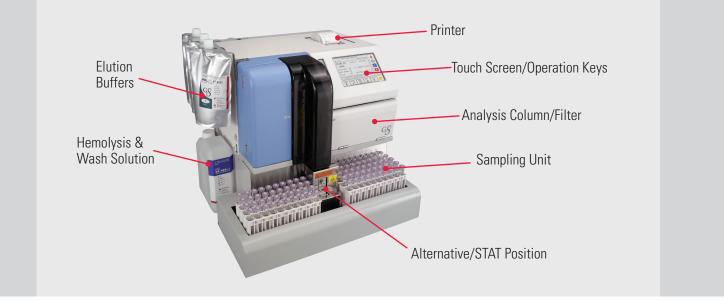
## Accurate, Reliable and Efficient

## **Compact and Flexible**

- Small benchtop footprint that fits into any laboratory – 21"w x 20"d x 19"h
- Weighs only 75 lbs
- Scalable in volume with compatibility with third party track lines

#### **Minimal Maintenance**

- High Mean Time Between Failure (MTBF)
- Proven record of over 300 days MTBF
- ≤1 service calls per year
- Minimal instrument downtime
- Cost savings



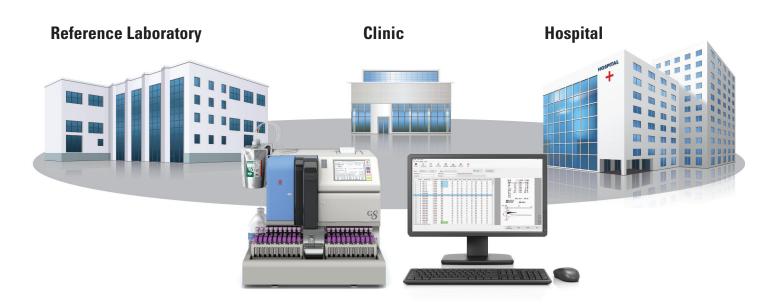
### **Streamlined Workflow**

- No manual cap piercing/sample pre-treatment
- Continuous sample loading
- Positive sample identification
- Result validated autoverification
- Minimum hands-on time

### **Simplified Operation**

- Touch screen
- User-friendly interface
- Automated start-up and daily maintenance
- Automated primary tube sampling

HbA1c/VAR ANALYSIS Ver 01.00 2022/08/25 09:53	•
STAND-BY 0.0 min 0.00 MPa 0000	тозон
AUTO SAVE : NO Y= 1.0000X+ 0.0000 AUTO TRANS: NO	START
CALIB : NO 2022/08/24 仄	STOP
FILTER/0007 COLUMN/0007	HOME
PAUSE MAINTE MENU STAT CALIB	



## **Adaptable to All Workload Volumes**

With an increase in diabetics, laboratories are experiencing an increase in the volume of A1c testing. The Tosoh G8 is a perfect solution for outpatient clinics, hospitals and large laboratory consolidated set-ups.

The Tosoh G8 fits seamlessly on third-party track lines for a complete laboratory automation experience.



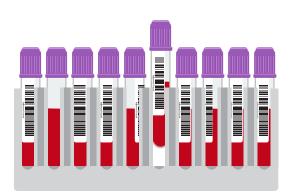
Monitor	GHb Result	Journal	GHb Libr	🧩 ary GHb Chart G	Hb St	atistics	0		GHb Trace	
eriod :	11/28/2019 🐨	9/21/2022 🛙		Model : HLC-723 G8		•				Find Adv. Search
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1	0001 - 06	SPEC	24	CHECK PEAKS		Pending		2020/12/21	17:48:0	Patient 10
2	0001 - 05	SPEC	24	CHECK PEAKS		Pending		2020/12/21	17:46:2	Name Connent
3	0001 - 04	SPEC	24	CHECK PEAKS		Pending		2020/12/21	17:44:5	GAL 18 Y =1.1543X + 0.4227
4	0001 - 03	SPEC	24	CHECK PEAKS		Pending		2020/12/21	17:43:10	Name 5 Time Area A1A 0.09 0.23 3.95
5	0001 - 02	SPEC	24	CHECK PEAKS		Pending		2020/12/21	17:41:3:	A18 0.64 0.31 6.51 F 0.37 0.38 14.92
6	0001 - 01	SPEC	24	CHECK PEAKS		Final		2020/12/21		LA10+ 3 17 0.47 22.02 5415 11.41 0.59 36.45
7	0001 - 06	SPEC	24	CHECK PEAKS		Final		2020/12/21	17:34:10	A0 84.22 0.87 850.40
8	0001 - 05	SPEC	24	CHECK PEAKS		Final		2020/12/21	17:32:3	H-10 H-11 5.42 1.11 50.20
9	0001 - 04	SPEC	24	CHECK PEAKS		Final		2020/12/21	17:30:5	H-N2 35.05 1.29 600.24 Total Area 1721.13
10	0001 - 03	SPEC	24	CHECK PEAKS		Final		2020/12/21	17:29:20	Hold 12, 94 5 Hof 0, 87 5
11	0001 - 02	SPEC	24	CHECK PEAKS		Final		2020/12/21	17:27:4	Fing:34 GEOK PEAKS
12	0001 - 01	SPEC	24	CHECK PEAKS		Final		2020/12/21	17:26:0	". <sup>81</sup>
13	0003 - 06	SPEC	24	CHECK PEAKS		Final		2020/12/21	17:20:2	4 8
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16	0003 - 03	SPEC	24	CHECK PEAKS		Final		2020/12/21	17:15:3	
17	0003 - 02	SPEC	24	CHECK PEAKS		Final		2020/12/21	17:13:5	(Unicom Peak)
18	0003 - 01	SPEC	24	CHECK PEAKS		Final		2020/12/21	17:12:2	Nate & Title Area
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## **Powerful Middleware**

With the power of the 501RP+ middleware solution, the efficiencies in your laboratory, from sample processing to result reporting, have just gotten even better.

- Paperless chromatography
- Auto verification by filtering results
- Reagent and data traceability
- Centralized QC and Levy-Jennings graphs

## **Fast Turnaround Time**



**Results in 96 Seconds** 



## **Confidence to the Core**

The core of the G8 is Tosoh's proprietary cation exchange HPLC column packed with non-porous resin. With over 30 years of HPLC experience, the G8 analyzer continues to use its in-house developed ion-exchange HPLC column to provide clear and true separation chromatography. The HPLC technology is considered gold standard technology and has been used in pioneer studies like the DCCT\*.

\*Diabetes Control and Complications Trial



# **Get the Complete Picture with Tosoh HPLC**

### **Reliable A1c Results**

- Clear separation between labile A1c (LA1C or LA1c) and stable A1c (SA1C or sA1c)
- HbAD, HbAS, and HbAC separated from A0 peak
- Reportability of HbA1c in the presence of HbAS, HbAC, HbAD, HbAE and HbF (up to 25%)
- Reportability of HbA1c in the presence of labile Hb, acetylated Hb, aldehyde Hb and carbamylated Hb

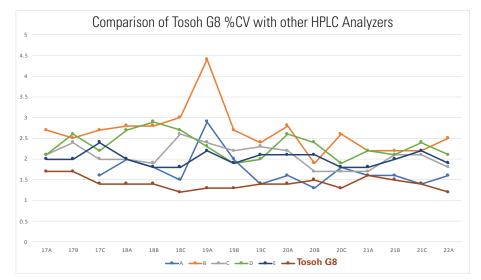
## **Detailed Chromatographic Result**

- Renowned precision, efficiency, and separation
- High resolution chromatograms
- Detailed report showing current calibration and characteristics (retention, percentage, and retention time of each fraction)
- Value of HbA1c %

* GLYCOHEMOGLOBIN REPORT *	* GLYCOHEMOGLOBIN REPORT
2020/12/12 10:30 T0S0H CORPORATION V05.24 N0:0003 SL 0001 - 02 ID:0001 - 02 CAL(N) = 1.1821X + 0.0785 NAME % TIME AREA FP 0.0 0.00 0.00 A1A 0.5 0.24 8.12 A1B 0.6 0.31 9.13 FF 0.6 0.38 9.11 LA1C+ 1.3 0.48 19.91 SA1C 5.3 0.59 68.37 A0 92.7 0.86 1448.19 T0TAL AREA 1562.84	$\begin{array}{c} 2020/12/12 (12:21)\\ TOSOH CORPORATION VO5.24\\ NO: 0041 SL 0005 - 06\\ ID: ABOD66\\ CAL(N) = 1.1944X + 0.5782\\ \hline \\ NAME & TIME AREA\\ FP 0.0 0.15 3.85\\ A14 0.4 0.22 5.70\\ A18 1.0 0.30 13.73\\ F 1.1 0.37 15.13\\ LA1C+ 1.2 0.47 18.00\\ SA1C 5.1 0.58 38.40\\ A0 93.1 0.88 1218.21\\ TOTAL AREA 1323.26\\ \hline \end{array}$
H6A1C 5.3%	HbA1C 5.1%
HbA1 6.4 % HbF 0.6 % 0% 15%	HbA1 6.59 ¥ HbF 1.14 ¥ 03 15%
	HBE SUSPECTED CHECK PEAKS

## **Tosoh HPLC-Your Key to a Reliable A1c Result**

## Historically Consistent CVs Year after Year of less than 2%



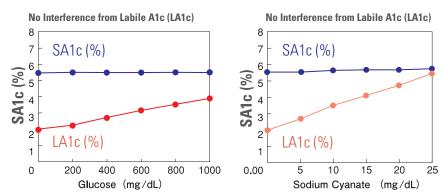
## **In-house Precision Data**

Mean HbA1c	%CV (Total)
5%	0.97
6.5%	1.04
8%	1.28
12%	0.87

Summary of between Lot, Day, Run and Analyzer.

Reference: CAP Survey data: 2017 to 2022

## No Interference from Labile A1c



The G8 provides direct determination of stable HbA1c (SA1c) with less than 2% CVs. The HbA1c results are not clinically affected by the presence of most hemoglobin variants or hemoglobin derivatives.

## **Tosoh HPLC - Brings Valuable Information to the Forefront**

Method	Ability to detect common hemoglobin variants and HbF	Interference from elevated HbF
Tosoh Ion-Exchange HPLC	Yes	>25%
Immunoassay*	No	>10-15%
Enzymatic*	No	>10-15%
Boronate Affinity*	No	>15%

\* Manufacturers' package inserts have variable claims for tolerance limits to HbF

#### **TECHNICAL SPECIFICATIONS**

#### Analytes

Principle Sample Requirement Sampling Volume

Throughput Data storage

#### **Main Unit**

Sampling Whole Blood

Column oven Column connection Detector unit

#### HbA1c (SA1c), HbF, HbA1 (Total A1) Ion-exchange high performance liquid chromatography Visible two-wavelength absorption Whole blood or diluted blood (K2/K3 EDTA) Whole blood: 4 µL Diluted blood: 80 µL 1.6 minutes per sample On-board memory up to 800 samples

Cap-piercing of primary sample tubes Automatic dilution by Hemolysis and Wash solution in dilution port Thermomodule in aluminum block Finger-tight type LED colorimetric detector

#### **PART NUMBER & DESCRIPTION**

0021560	HLC-723G8 (Main Unit)
0021674	G8-LA (Line Automation)
0021561	G8-90SL (90 Sample Loader)
0021562	G8-290SL (290 Sample Loader)
0021955	TSKgel G8 Variant HSi (Column)
0021956	G8 Variant Elution Buffer HSi No. 1
0021957	G8 Variant Elution Buffer HSi No. 2
0021858	G8 Variant Elution Buffer HSi No. 3
018431US	HSi Hemolysis & Wash Solution
0018767	Hemoglobin A1c Calibrator Set
220232	Hemoglobin A1c Control

HbA1c Calibrator Set



HbA1c Control



Analysis Column



Elution Buffers (Variant Analysis Mode) and Hemolysis & Wash Solutions





#### **Sample Loading Units**

Sample loading capacity Sample holding Sample vial Barcode specifications

G8-90SL: 90 samples and one STAT position G8-290SL: 290 sample and one STAT position 10 samples/rack 12 - 15 mm x 75 - 100 mm primary tubes and Tosoh vials NW-7, CODE39, ITF, CODE128. JAN, COOP 2 of 5, Industrial 2 of 5

#### System control/Data processing

**Display & Input** Output Communication Operating temperature Power requirement

Liquid crystal display touch panel Thermal paper (roll paper), USB, LIS or 501RP+ RS-232C serial standard (bi-directional)  $15 - 30^{\circ}$  C AC 100 - 240 V, 50/60 Hz, 180 VA

#### **Dimensions/Weight**

90SL Model	W 21" (530 mm) x D 20" (515 mm) x H 19" (482 mm)
	75 lbs (34.0 kg)
290SL Model	W 44" (1120 mm) x D 21" (530 mm) x H 19" (482 mm)
	114 lbs (51.5 kg)
LA Model	W 21" (530 mm) x D 29" (723 mm) x H 19" (482 mm)
	79.4 lbs (36.0 kg)

### For more information, call 1.800.248.6764

Tosoh products are for Prescription use only as In-Vitro Diagnostics

# TOSOH BIOSCIENCE

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